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THEORIES OF MIND

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(Comments on Dr Smythies' paper, *Three Classical Theories of Mind*. See Journal, Part 706, Dec. 1960.)

DR SMYTHIES' paper on the nature of mind has raised a series of interesting problems which are highly relevant to psychical research and yet have been far too often ignored. I fully agree that both the physicalism advocated by the earlier logical positivists and the modified behaviourism advocated by Ryle and various members of the Wittgensteinian school has altogether failed, and that the 'best explanation of the world of mental events' is to be sought in a return to 'the classical solution', more or less amended no doubt to conform with the discoveries of modern physics and modern neurology. After all in the material world of the behaviourist and the physicalist the facts of ordinary everyday cognition would be as great a marvel as precognition, ordinary thinking as telepathic thinking; and, as Dr Thouless has pointed out, the apparent power of the conscious will to act on the motor nerve-cells in the brain is a most astonishing instance of psychokinesis. In my view therefore the puzzles of parapsychology are little else than special cases of the more general problems of normal psychology. *Prima facie* both imply that the universe contains an irreducible element of dualism.

Dr Smythies describes the three main versions of the classical theory of mind. That theory was itself essentially dualistic; and he endeavours to meet the objections urged by present-day psychologists and philosophers with several ingenious suggestions. His arguments, however, like those of his opponents and the

majority of those who have dealt with the problem, seem to be couched primarily in terms of the traditional logic of subject and predicate, i.e. of substance (or 'entities') and their attributes. But the arguments of modern science are based mainly on a logic of relations—a logic which has but recently been systematically worked out. Man is a visualizer; and spatial relations, seen or imagined in visual space, are practically the only relations which ordinary people can understand or manipulate with ease. Almost the only relations recognized by pre-renaissance scientists were those of space.¹ Nevertheless, even Euclid's reasoning about such relations did not conform with the canons of Aristotelian logic. Post-renaissance science recognized, or rather assumed, a relation of cause-and-effect. And modern physics postulates many other relations, some of them unique and irreducible. At the same time it has renounced the effort to discover the intrinsic nature of the entities concerned, i.e. to say what are the basic attributes of the substances; it is content, as Eddington puts it, to determine 'the pattern of *relations* between operators whose essential character it leaves unknown'. Modern psychology must do the same.

At this moment I see before me an elongated bright red patch which I take to be the surface of a stick of sealing wax. To me at least it seems obvious that my *awareness* of that scarlet strip is a specific kind of relation, unanalysable and incapable of reduction to any other kind of relation. A relation links two things—in this case, me and the scarlet strip. On the one side, there is something that cognizes or experiences—a mind, an organism, perhaps only a passing thought; on the other side, there is something that is experienced or cognized—a red sense-datum of a particular shape; and, connecting the two, this relation of cognition. What is more, I can become aware of this awareness. I can cognize this cognitive relation, just as I can cognize the spatial relation between the sealing wax and the inkpot, and say that the sealing wax is to the left of the inkpot.

But this is not all. In addition there is, so it would seem, a further relation of implication between the shiny red patch and the solid stick of sealing wax, so that this particular strip of colour (which will presently disappear) is a sign or symbol which signifies the actual presence of the stick of wax (which will remain until it is melted and used). These two relations—that of direct

¹ This is perhaps not quite true of St. Thomas Aquinas (*cf. De Potentia*, VII-VIII); but his discussion of knowledge as a 'relation based on apprehension according to a mode of spiritual being' is decidedly obscure and had little influence on his successors.

sensory awareness and that of implication—can be compounded (as relations often are), and thus result in a third relation of indirect cognition or *perception*. In that way I can legitimately declare that I perceive a physical object called the sealing wax, without thereby suggesting the physical object must itself depend for its existence on my own sensory consciousness. Philosophers sometimes speak of sense-data as 'contents' of consciousness, and refer to physical objects as 'external' (a description used by Dr Smythies). But these spatial metaphors are apt to be misleading, and should therefore be avoided as far as possible.

Dr Smythies' account of such a situation is rather different. He is interested primarily in the postulated entities and their attributes. He asks, for example, whether sense-data are mental or physical, whether they have spatial properties or whether they are (as Descartes insisted) unextended and therefore non-spatial, and if there can be such a thing as a conscious or thinking substance. This brings him up against the familiar epistemological puzzles. From birth onwards we seem almost instinctively to assume a world of things and persons around us, existing independently of ourselves. Common sense takes us for granted that both primary qualities (shape, size, weight, solidity, etc.) and secondary qualities (warmth, sound, colour, etc., e.g. the redness of the sealing wax) are objective attributes of these physical things. Classical science on the other hand maintains that secondary qualities are purely subjective or mental. But the neurologists go further still. Their observations have led them to conclude (quite rightly in my view) that *both* secondary and primary qualities are purely subjective or mental.

Nevertheless, the neurologist, like most other scientists, assumes that the things that he studies—brains, nerves, and the like—and the instruments that he uses and the building in which he works are all physical objects in physical space, existing independently of his mind, and continuing to exist even when his conscious experience of them has been interrupted. But, if the sense-data we perceive are all purely mental, how (Dr Smythies inquires) can we possibly defend this widespread belief in the existence of 'physical objects external to this collection of sense-data'? On the relational theory the answer is plain. If consciousness is neither a substance nor an attribute but simply a relation, then anything of which we are conscious may well continue to exist when we are no longer conscious of it, just as John Brown's wife may continue to exist after she has been divorced and even after Brown himself has died. And the best justification for the belief in a relatively permanent physical world, existing

and changing independently of ourselves, is merely the claim that it is the simplest and most obvious working hypothesis—the one that best accounts for the puzzling way in which sense-data continually appear and disappear and then reappear in a systematically changing form, quite regardless of our wishes or will.

Dr Smythies, like most other neurologists—Sir Charles Sherrington, Professor Eccles, Sir Russell Brain—accepts the notion of sense-data as purely mental; but he is still troubled by two of the commonest criticisms. If sense-data are mental, or, as it is sometimes put, 'exist solely in the individual's mind', how can they be caused or generated by processes in the physical world or in the individual's brain, which by hypothesis are purely material? And conversely how can sense-data in a purely mental world yield information about objects in a purely physical world? Are we not after all compelled, as Professor Ryle has urged, to abandon a conception of the mind which treats it as a kind of immaterial ghost lurking within a physico-chemical machine?

Here, I think, the difficulty mainly arises from the tacit assumption that if one system is to act on, or give information about, another, then the two systems must be similar. This is implied by the traditional designation given to the theory of mind with which Dr Smythies is chiefly concerned—namely, the 'representative' theory. To borrow an illustration from his own illuminating book—*The Analysis of Perception*—our mental pictures are presumed to re-present the objects which cause them, much as the images on a cinematographic or television screen re-present the scenes which the camera has photographed. Thus the 'alleged relation' between sense-data and physical objects is apparently reduced to the familiar relation of similarity. That, however, is plainly insufficient to explain the conscious element in all perceptions; and in fact it is untrue. The sensations I get from a flame of a burning fire, for example, in no way resemble the physical process as described by science.

Dr Smythies himself therefore, if I understand him rightly, is led to reject the representative theory—at least in its traditional form. Instead he points out that certain of the contents of consciousness—notably visual sense-data—possess spatial characteristics, and so may be regarded as existing in a kind of private mental space. He then supposes that this 'image space' (as he calls it) and the physical space of ordinary science are both sections of one and the same 'hyper-space'. And, if mental events, like physical events (e.g. the occurrence of a stimulus or the process which the outer stimulus sets up in the brain), are 'spatial entities', then we can validly explain the relation between them

as essentially one of causal interaction. Accordingly Dr Smythies considers sense-data to be merely 'end-products of the causal chain of perception'; and on the basis of this interpretation he concludes that 'the mind-brain problem can be solved by advances in neurophysiology'.

I confess that I do not see how all this, even if we accepted it, would make it easier to understand what are commonly regarded as paranormal forms of cognition. The mere fact of causal interaction cannot of itself account for cognition; and a great many mental states or 'contents'—anger, happiness, pleasure, imageless thoughts—have no spatial characteristics whatever. We therefore seem forced after all to admit that the cognitive relation is a relation *sui genesis*, reducible neither to causal relations nor to spatial relations, nor yet to relations of mere similarity. If so, the mind-body problem is not merely a problem in neurophysiology: it is a problem for psychology.

There can, I think, be little question that only certain things can be either the subject or the object of a direct cognitive relation (i.e. of a relation of immediate awareness)—namely, what are popularly termed 'minds' and what are variously termed mental 'contents' or 'sense-data' (including in that phrase images and feelings). Both these types of entity have provided the chief traditional problems for psychological study; and to these I myself should add a third group of problems, namely, the various types of conscious relation.

A few contemporary psychologists, it is true, still cling to a thoroughgoing behaviourism of materialism of the Pavlov-Watsonian type: they believe solely in physical processes and deny the possibility of anything mental. But their number is rapidly diminishing. They, naturally enough, declare outright, as Mr Hansel for instance has done, that telepathy and other paranormal phenomena are quite impossible on *a priori* grounds. On the other hand, the best known physicists of this century alike in Britain and on the continent—Eddington, Jeans, Whittaker, Heisenberg, Jordan, etc.—are wholly or partly 'mentalists' in their philosophical views. And, so far as they have expressed any opinion on the matter, they seem to agree that consciousness is a special type of relation or interaction, in addition to the many other irreducible types of interaction already postulated in modern science.

Now I hold that the cognitive relations involved in telepathy, clairvoyance, etc. are essentially of the same generic character as those of normal perception and normal thought. Moreover, many, if not most, of the ideas thus communicated arrive in the form of sense-data (e.g. hallucinatory percepts or veridical images

and thoughts). If these contentions be accepted then, it would seem, parapsychology must become a special branch of normal psychology; and in my view it could most fruitfully be approached and studied from this standpoint. The task of psychical research will then be, not (as is commonly assumed) to discover some paranormal hypothesis to account for supposedly paranormal phenomena, but to adapt or devise normal psychological explanations to account for what are simply somewhat unusual and decidedly baffling examples of purely normal psychological processes. But if this is to be possible, psychology must resume its former status as a science in its own right, concerned with its own unique phenomena, and cease to be treated as a mere branch or application of the physiology of the brain.

THE EFFECTS OF CENTRALLY ACTING DRUGS ON ESP ABILITY IN NORMAL SUBJECTS

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A LIMITED number of experiments have been performed in which the effects of drugs have been tested objectively on psi phenomena. Soal and Bateman (1) have given a critical review of these experiments. Experiments have been performed on gifted percipients to examine pure clairvoyance, telepathy, and psychokinesis using alcohol (2) and sodium amyta and caffeine (3) (4). In these experiments the active compounds which were being examined were administered in alcoholic drinks or as caffeine in the form of Coca-Cola. When compared with modern trials used to test drugs for clinical administration, the early experiments show many deficiencies. Inadequate control tests were made and insufficient information was given about the scores before and after the drugs were taken to allow any firm conclusions to be drawn about their effects. The experimenters knew what the drugs were, and even though the subject may not have been actually told what was happening, the experimenter could have suggested what result was desired. In the experiments in which the subjects knew which drugs they were receiving, there is no conclusive evidence to show that such suggestion was not occurring. It has indeed been demonstrated experimentally that the opinions of the subjects about the actions of drugs can have a considerable effect on their pharmacological actions (5). No con-

trol tests with placebos¹ were performed, and it is now considered that the parapsychological methods in these early experiments were not sufficiently rigorous to meet the minimum standards required for modern experiments in parapsychology (6). Cadoret (7) examined the effect of sodium amytal and dexedrine in a small number of subjects who had no special psychic ability. The experiments were designed carefully, using placebos and the double blind technique, and all the requirements for rigorous parapsychological testing were observed. The results showed that dexedrine caused a significant fall, while sodium amytal caused a limited decline, in scoring with ESP cards. However in tests in which free response material was used, dexedrine caused an improvement in scoring while sodium amytal still produced a decline.

In an examination of the effect of changed physiological conditions, Woodruff (8) was unable to show any effects on ESP which could not be attributed to the effect of boredom during the experimental sessions. Cadoret attempted to explain his results wholly in psychological terms; he was unable to show that ESP bore any relation to D.C. potential on the subject's body surface and did not attempt to relate his experimental observations to the physiological or biochemical actions of the drugs in the brain. It is only recently that some suggestive evidence has been obtained which relates physiological mechanisms in the body with psi phenomena (9). Rhine and Pratt (6) state 'As a functioning part of the organism, psi clearly has some kind of direct relation with the physiological system. Certainly the manifestations of psi in all the forms thus far recognized would have to involve the nervous system in particular, and the organism in general, to some extent.' In that the science of pharmacology enables the investigator to influence the physiological and chemical mechanisms of the central nervous system almost at will, it seems that the most profitable use of this science in parapsychology would be to attempt to find an explanation for the effects of drugs on psi phenomena which is related to the sites and mechanism of action of drugs in the brain. In this way it might be possible to obtain some evidence about the part of the brain from which these phenomena arise.

Two separate experiments were performed in the procedures described below. Both experiments were carried out by using a modification of the double blind technique. Both experimenters

¹ Placebo = a counterfeit inert tablet indistinguishable in appearance, taste and smell from the tablets containing the active drugs. From the first words of the first antiphon of the office, *placebo domino*, I shall please the Lord.—Ed.

and subjects were ignorant of the order in which the drugs would be administered, but the kind of pharmacological actions which each of the drugs would have was described to the subjects before the experiments were started. Although significant results were not obtained, an attempt was made to explain the trends which were observed in the first experiment in pharmacological terms. The justification for this attempt did not appear to be very good in the second experiment, but the results of these experiments are reported in order to show how pharmacological analysis of the action of drugs might be of use in parapsychology.

METHODS

Selection of Subjects: The subjects for both experiments were volunteers from the University staff and students. A preliminary test was given to the subjects in order to select those who displayed positive or negative ESP ability. The subjects were asked to guess two columns, each of 25 ESP symbols, in a sealed envelope. Those who scored 12 or more, or 8 or less were selected for further tests. One hundred subjects were selected for the first experiment; 26 of the subjects who had been selected for the first experiment were used for the second experiment without further testing.

Experimental Procedure

First experiment: The subjects carried out the tests during three afternoon sessions. They took the drugs at about 2 p.m. after having had lunch at least an hour before the test was performed. The drugs were administered on three successive afternoons, or, if this was not possible, during afternoons in the same week. Forty-five minutes after taking the drugs the ESP tests were carried out. The drugs were made up in the form of identical tablets. The subjects were told that they would receive an inactive drug, a stimulating drug and a sleeping drug in the tests. The order of administration of the drugs was randomized and all the compounds were administered to all the subjects. The composition of the tablets is shown in Table 1. The drugs were identified alphabetically and the key to their identification was withheld from the subjects and experimenters until all the tests had been finished and the forms corrected. The subjects were told that no unpleasant or toxic effects were to be expected from the drugs, and that they would receive fifteen shillings when they had taken all the tablets and finished their tests.

Each subject was asked to guess two columns of 25 ESP symbols in a sealed envelope after he had taken each tablet. The

forms were prepared and placed in the envelopes before the subjects volunteered for the experiment, and the envelopes were distributed during the experiment by means of random number tables. Strict precautions were taken to avoid conscious or unconscious fraud. The details of these precautions have been omitted since the experimental results did not show significantly positive effects.

The first 40 subjects were only tested after the drugs had been administered, but the remaining 60 were also given a control test of a similar kind before the first tablet was taken.

Second experiment: The general design of this experiment was similar to that in the first experiment except that four compounds were administered to the subjects and their composition differed as shown in Table 2. Some psychological tests were also performed and an assessment of the pharmacological actions of the drugs was carried out. The results of this part of the experiment have been described independently (5). Fifty-four subjects took part in this experiment, 26 of whom had already done the first experiment. The remaining 28 subjects were selected in the same way as in the first experiment. All the subjects did a preliminary control ESP test before taking the first capsule. They did the experimental tests two hours after administration of the capsules. In the ESP tests the subjects guessed four columns of 25 symbols which were prepared in the same way as in the first experiment.

The subjects were given twenty-five shillings when they had taken all the capsules and finished their tests. In addition, they were divided into groups of 10 and before doing the tests they were told that the highest scorer in each group would receive a prize of seven shillings and sixpence.

RESULTS

FIRST EXPERIMENT

Evidence for ESP

As both high and low scorers were selected for the drug tests, the best test for the occurrence of *ESP* in the experiment was the distribution of scores with lactose. This differs from the expected binomial distribution very significantly. A similar distribution was obtained with the control tests though the difference from the expected distribution was not significant possibly because of the smaller number of subjects which were tested (Table 3).

Effects of quinalbarbitone and amphetamine

The scores after administration of these drugs are shown in Table 4. None of these results are significant, but it is of some

interest that the score following administration of the quinalbarbitone is considerably depressed below chance expectation. Unfortunately this effect was not repeated in the second experiment. The critical ratio did not quite reach a significant value and so this observation may be of no importance in interpreting the effect of quinalbarbitone on ESP ability.

SECOND EXPERIMENT

Evidence for ESP

The distributions of the scores in the control test and for lactose did not differ significantly from the expected binomial distribution. However there was an apparent deficiency in scores in the range 18 to 20 (i.e. in part of the 'average' range) which would possibly have been significant if the same number of subjects had been used as in the first experiment.

Effects of caffeine, dartalan and quinalbarbitone

The scores after administration of these drugs are shown in Table 5. The values do not differ significantly from those for mean chance expectation. It can however be seen that the score after the administration of dartalan was well above MCE, unlike those for amphetamine and quinalbarbitone which were below it in the first experiment. In this experiment the score for quinalbarbitone differed very little from MCE.

Discussion

The significant actions of amphetamine and a barbiturate on ESP ability which Cadoret reported were not repeated in the present experiments. In the first experiment it was found that a reduction in the ESP ability was associated with the administration of quinalbarbitone, and that amphetamine also slightly reduced the scoring level below mean chance expectation although this was less pronounced. In an effort to explain this unexpected result with amphetamine it was postulated that, since the drug acts by increasing the subjects' awareness of changes in the environment, it might interfere with ESP ability for this reason. It was postulated that quinalbarbitone might exert its depressant effect on ESP ability in virtue of its uniformly depressant action on the central nervous system. It was therefore thought that a drug which did not have the widespread depressant effect of quinalbarbitone on the central nervous system, and which did not make the subjects abnormally sensitive to changes in the environment, like amphetamine, might be effective in raising the scoring level. A drug which it was believed would reduce

emotional tension without simultaneously interfering with intellectual processes was therefore chosen from among the group of tranquilizers and was tested in the second experiment. The effect of quinalbarbitone in the second experiment could not be repeated but it was found that dartalan appeared to raise the scoring level above MCE. Although the effect which followed the administration of dartalan was not statistically significant, the apparent slight improvement which it produced in ESP ability suggests that further carefully controlled scientific investigation of the effect of tranquilizers on parapsychological phenomena might be profitable.

The authors wish to express their appreciation of the great interest and help extended to them by Dr Pratt and other members of the staff of the Parapsychology Laboratory, Duke University. They also wish to make grateful acknowledgement to Dr J. B. Roberts for his assistance in arranging the distribution of the tablets and capsules to the subjects, and to Mr G. W. H. Leytham for the original evaluation of the record sheets. They wish to acknowledge the help given by Messrs Eli Lilly and Co. Ltd, and Messrs G. D. Searle and Co. Ltd, for preparing and supplying the compounds which were used, and for the financial assistance which enabled the experiments to be carried out.

TABLE 1

COMPOSITION AND DESCRIPTION OF THE TABLETS ADMINISTERED TO THE SUBJECTS IN THE FIRST EXPERIMENT

Compound	Dose	Description
Lactose	Quantum sufficient	Inactive drug
Dexamphetamine sulphate	10 mg.	Stimulating drug
Quinalbarbitone sodium	90 mg.	Sleeping drug

TABLE 2

COMPOSITION AND DESCRIPTION OF THE CAPSULES ADMINISTERED TO THE SUBJECTS IN THE SECOND EXPERIMENT

Compound	Dose	Description
Lactose	Quantum sufficient	Inactive drug
Caffeine and lactose	300 mg.	Stimulating drug
Thiopropazate dihydrochloride (dartalan)	20 mg.	Relaxing drug
Quinalbarbitone sodium and lactose	120 mg.	Sleeping drug

TABLE 3

DISTRIBUTION OF SCORES IN CONTROL TEST AND IN TEST
AFTER ADMINISTRATION OF LACTOSE: FIRST EXPERIMENT

No. of Hits 50 maximum	Control 60 Subjects		Lactose 100 Subjects	
	No. of subjects with scores set out in Col. 1	Expected No. of subjects	No. of subjects with scores set out in Col. 1	Expected No. of subjects
(under 5)	0	6.20	0	10.36
5	0		3	
6	5	5.22	6	8.70
7	8		5	
8	8	7.01	13	11.69
9	6	8.19	11	13.64
10 (=MCE)	8	8.39	11	13.98
11	1	7.62	11	12.70
12	10	6.19	27	10.32
13	3	11.15	6	7.54
14	5		5	
15	2	11.15	0	11.06
16	3		1	
17	1	11.15	0	11.06
(over 17)	0		0	

$$\chi^2 = 11.15 \text{ (7 d.f.)}$$

$$P > 0.1$$

$$\chi^2 = 32 \text{ (8 d.f.)}$$

$$P < 0.001$$

TABLE 4

THE EFFECTS OF THE DRUGS ON SCORING ABILITY
IN THE FIRST EXPERIMENT

Drug	Runs	Deviation from MCE	S.D.	C.R.	P
Control	120	+ 19	21.90	0.87	>0.32
Lactose	200	+ 25	28.28	0.88	>0.32
Amphetamine	200	- 30	28.28	1.06	0.32
Quinalbarbitone	200	- 55	28.28	1.94	0.052

TABLE 5

THE EFFECTS OF THE DRUGS ON SCORING ABILITY
IN THE SECOND EXPERIMENT

Drug	Runs	Deviation from MCE	S.D.	C.R.	P
Control	216	+ 2	29.40	0.07	>0.32
Lactose	216	- 38	29.40	1.29	>0.13
Caffeine	216	+ 28	29.40	0.95	>0.32
Dartalan	216	+ 46	29.40	1.56	<0.13 >0.046
Quinalbarbitone	216	+ 6	29.40	0.20	>0.32

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EXPERIMENTAL CARD-GUESSING USING MEDIUMS AS PERCIPIENTS

BY RICHARD K. SHEARGOLD

REASONS FOR THE EXPERIMENTS

AT THE time of the founding of the S.P.R. in 1882 evidence for the existence of a faculty of extra-sensory perception or 'paranormal cognition' to give it its original name rested chiefly with the establishment of the authenticity of spontaneous cases, (premonitions, phantasms, etc.), and also with the utterances of mediums. To most students today, the evidence for extra-sensory perception largely rests upon the card-guessing experiments of Drs Rhine and Soal; which would appear to establish the existence not only of telepathy, but of precognitive and post-cognitive telepathy; as well as on occasions, of clairvoyance. (Clairvoyance in these cases implies the direct cognition of information and has no Spiritualistic implications.) It is therefore standard

practice in psychical research today to examine all utterances of mediums, and in those cases where fraud cannot be held to account for the acquisition of apparent paranormal information, to break the statements up into the four classifications, telepathy, precognitive/postcognitive telepathy, or clairvoyance (in the sense mentioned above).

Taking into account the foregoing, it seemed to the writer to be of paramount importance to discover how mediums as a class would behave when subjected to tests similar to those upon which modern evidence for telepathy largely depends. Sir Oliver Lodge did in fact carry out a few somewhat similar experiments around 1889¹ with 'Dr Phinuit' a control of the famous medium, Mrs Leonora Piper; and of course of recent years Dr Rhine has done considerable work with Mrs Eileen Garrett, but it nevertheless remains true to say that until the present series was commenced in 1958, no attempt had been made to subject mediums *as a class* to card-guessing tests. There were three main possibilities.

- (a) All, or a number of mediums could have achieved high positive or negative scores against chance.
- (b) A common pattern of guessing might have appeared which might have become known as the 'mediumistic pattern'.
- (c) The results could be completely featureless.

EXPERIMENTAL TECHNIQUE

The experiments commenced in September 1958 and were concluded in October 1960. All except one were held at the rooms of the Society, the exception being due to the clashing of the date with that fixed for a Council meeting, and consequently the experiment was held at the business offices of a London member. In all, some sixteen different mediums were tested. Of these, fifteen were professionals, and one a good amateur medium. Eight of the professionals are particularly well known for their work in the Spiritualist movement, and all are regularly employed as mediums. Five were male, and eleven female. One was a trance medium.

The technique adopted has come to be recognised as standard for card-guessing tests for general ESP, but will be described in some detail. Before so doing however, mention must be made of one important departure from standard practice. This concerns the presence of a potential 'sub-conscious Agent'. Whilst, as discussed above, in the present state of our knowledge there is

¹ Proc. S.P.R. Vol. VI, 1889-90.

no *a priori* reason why a medium should not be able to tap the sub-conscious mind of any living person anywhere in the world; since it has so often been asserted that mediums in giving their alleged spirit messages are tapping the sub-conscious minds of their sitters, and that furthermore they are more prone to do this than to tap the *conscious* thoughts of their sitters; and that every little detail of one's life, no matter how trivial is stored in one's sub-conscious mind and is therefore available to the medium, the writer considered it desirable to have present in the building, though inaccessible to the medium, the person who randomized the cards prior to the experiment and could therefore be presumed to have their order stored in his sub-conscious mind. This person was not introduced to the medium until after the experiment in order to preclude any possibility of the passing, albeit accidentally, of sensory clues.

On arrival in all cases it was explained very carefully to the medium that she was invited to help us in our researches into the working of telepathy between living minds. It was explained that during the past years many thousands of persons had been similarly tested, but that now we were anxious to obtain the co-operation of a number of successful mediums in order to discover how their results would differ from those obtained from non-mediumistic persons. A number of the mediums expressed unfamiliarity with the idea, and it was carefully explained to them that in order to obtain the correct answers they could use any method they chose, for example if they could arrange for their spirit guides to give them the information then that would be perfectly satisfactory so far as we were concerned. Without exception it is felt that mediums taking part honestly tried to do their best to guess the cards correctly. In certain cases it was obvious that they were confident of considerable success.

The medium was seated comfortably at the head of the table in the library, and in front of her were sample ESP cards; namely circle, cross, star, square, and waves. It was customary to engage in a little chat for a few minutes until the medium felt at home with the experimenters. The medium was then shown ten envelopes, sealed and each containing a randomized pack of ESP cards. Open packs were used, that is, packs not necessarily containing five cards of each symbol. The medium was invited to handle the envelopes in the presence of the experimenters, in order that she might be able to pick up psychometric impressions. (Naturally she was not permitted to open the envelopes!) These envelopes had previously been numbered one to ten, and the medium was invited to name the order in which they were

presently to be opened and an attempt made to communicate their contents telepathically to her. The order she gave was recorded. She was next asked to name from the experimenters present one to act as the Agent, and when she had done so the person chosen left the library and went upstairs to the larger office taking the envelopes containing the packs of cards and the list giving the order in which they were to be opened. With him in the upstairs office was the potential sub-conscious agent discussed previously, who had randomized the cards.

Downstairs in the library, one of the experimenters prepared to record, on previously prepared pads, the guesses of the medium; and a second experimenter prepared to act as observer in order to see that a correct record was maintained. Buzzer communication had been installed from the library to the upstairs office, and when all was ready, the recorder sent a signal to the Agent who picked up the envelopes chosen by the medium as the first to be opened, opening it, and laying the cards face downwards on the table alongside him he picked off the top card looked at it and endeavoured to send it telepathically to the medium. At the same time he recorded the symbol on a previously prepared pad. When the medium had made her guess, and the guess had been properly recorded, the recorder signalled the Agent by means of one short buzz. The Agent then laid the card he was looking at face downwards and picked up the next card from the pack, which he tried as before to transmit telepathically to the medium. This sequence of operations was repeated until the whole pack of 25 cards had been dealt with, this being signalled by means of a long buzz. A short break then took place before the next pack was guessed and so until all ten packs had been guessed and recorded. No attempt was ever made to check the results in the presence of the medium; as a matter of fact the target records were left upstairs until the medium had left the premises, and no checking took place until the following day. Some mediums expressed disappointment that they were not to be told the result, but it was explained that we were anxious to avoid the drawing of invidious comparisons, and that we were equally grateful to all the mediums who took part, even though they might not be equally successful.

RESULTS

The table of results given below will show that none of the mediums gave truly significant results, although one or two scored marginally above or below chance expectation. The names of the mediums have been suppressed for the reason

already mentioned. Anticipating the criticism that the mediums could not be expected to score well the first time they took part in what was to them an unfamiliar exercise, we accordingly chose two of their number of opposite sexes who had scored marginally above chance, Mrs O on the -1 deviation and Mr Q on target, and submitted each to a number of further exactly similar tests. Although it was very obvious that their confidence grew considerably, in fact they both became completely at home with the experimenters and looked forward to coming, no significant scores were obtained. So once again it must be recorded that no progress in finding good card-guessing subjects was made. Not only did the mediums fail to score significantly in a positive or negative direction, but there emerged no 'mediumistic pattern' of guessing.

SUMMARY OF SCORES

	-2			-1			0			+1			+2		
	n	h	d	n	h	d	n	h	d	n	h	d	n	h	d
18/9/58	138	30	+2.4	144	30	+1.2	150	33	+3	144	24	-4.8	138	27	-0.6
14/10/58	207	45	+3.6	216	33	-10.2	225	36	-9	216	50	+6.8	207	42	+0.6
11/11/58	230	47	+1	240	54	+6	250	47	-3	240	51	+3	230	57	+1.1
13/1/59	230	48	+2	240	47	-1	250	49	-1	240	48	0	230	39	-7
30/1/59	230	44	-2	240	45	-3	250	53	+3	240	45	-3	230	45	-1
8/5/59	230	46	0	240	52	+4	250	45	-5	240	49	+1	230	49	+3
11/5/59	230	44	-2	240	46	-2	250	58	+8	240	40	-8	230	40	-6
28/8/59	230	54	+8	240	44	-4	250	46	-4	240	43	-5	230	42	-4
22/9/59	230	42	-4	240	41	-7	250	48	-2	240	36	-12	230	50	+4
26/10/59	230	41	-5	240	55	+7	250	56	+6	240	38	-10	230	47	+1
4/11/59	230	58	+12	240	44	-4	250	46	-4	240	44	-4	230	49	+3
25/3/60	230	40	-6	240	57	+9	250	54	+4	240	51	+3	230	45	-1
10/4/59	230	45	-1	240	43	-5	250	36	-14	240	52	+4	210	45	-1
4/3/60	230	31	-15	240	53	+5	250	42	-8	240	52	+4	230	52	+6
	460	76	-16	480	96	0	500	78	-22	480	104	+8	460	97	+5
11/12/59	230	43	-3	240	62	+14	250	42	-8	240	47	-1	230	41	-5
16/2/60	207	44	+2.6	216	32	-11	225	58	+13	216	38	-5	207	46	+4.6
12/4/60	230	41	-5	240	44	-4	250	46	-4	240	46	-2	230	46	0
10/5/60	230	44	-2	240	49	+1	250	50	0	240	59	+11	230	54	+8
7/6/60	230	45	-1	240	46	-2	250	56	+6	240	47	-1	230	44	-2
16/8/60	230	47	+1	240	45	-3	250	51	+1	240	53	+5	230	44	-2
	1357	264	-7.4	1416	278	-5	1475	303	+8	1416	290	+7	1357	275	+3.6
8/10/59	230	46	0	240	56	+8	250	55	+5	240	42	-6	230	47	+1
21/1/60	230	38	-8	240	45	+8	250	42	-8	240	42	-2	230	45	-1
	460	84	-8	480	101	+5	500	97	-3	480	88	-8	460	92	0
17/12/59	230	32	-14	240	49	+1	250	63	+13	240	32	-16	230	43	-3
29/4/60	230	48	+2	240	42	-6	250	52	+2	240	40	-8	230	63	+17.2
22/7/60	207	49	+7.6	216	27	-16	225	52	+7	216	48	+5	207	35	-6.4
7/10/60	230	44	-2	240	59	+11	250	46	-4	240	42	-6	230	44	-2
	897	173	-6.4	936	177	-10	975	213	+18	936	162	-25	897	185	+5.6
ls	5819	1136	-27.8	6072	1200	+14.4	6325	1262	+3	6072	1163	-51.4	5819	1181	+17.2
	MCE = 1163.8			1214.4			1265			1214.4			1163.8		

n = number of trials

h = number of hits

d = deviation from mean chance expectation (MCE)

MCE = n/5

It was interesting to note the procedures adopted by the different mediums. One 'saw lights' on the sample cards on the table; some claimed they were being told the correct cards by their spirit guides; one paced the room whilst guessing; another kept shuffling the sample cards into curious patterns, and some exhibited no idiosyncrasies. None seemed interested in handling the sealed envelopes for psychometric clues beforehand. Five mediums were particular about the order of opening the packs; the rest did not express any preference and chronological order was observed.

Experiments with mediums are always interesting, but two deserve special comment, this for widely different reasons. As already mentioned, we enlisted the services of one trance medium. During the evening this medium was controlled by three different entities, and also guessed cards in the normal state. A few days later the writer attended a seance with this medium during which one of the controls 'came through' and claimed to have met the writer 'at the funny place where we guessed the cards'. Since the writer was in fact the agent chosen by the medium he was of course upstairs all the time. When he pointed out to the control that he had not been present whilst the medium was entranced, the control explained that she had come upstairs to see how they were getting on! Despite this there was of course no significance. In fairness however it must be pointed out that it would be impossible by looking at the targets alone to know what guesses had been scored against them.

The second medium calling for special mention was a certain lady who upon the conclusion of the experiment insisted on having a special test in which she might be told the result. She was so enthusiastic that she also made the entire team take their turn at card-guessing during which she acted as agent! She completely took command, and kept the unfortunate experimenters hard at work for a further hour and a quarter! In justification she volunteered the information that she had been reading Dr Soal's 'Modern Experiments in Telepathy'.

CONCLUSION

As is inevitable, opinions will differ with regard to the implications to be drawn from this series, and if these experiments draw forth fresh thought they will for that reason alone have been well worth while. The writer would merely like to conclude by suggesting that we may have been a little premature in judging all mediumistic utterances on the basis of tests with a very few per-

sons who have apparently possessed the ability to guess cards correctly. There may very possibly be no connection whatever between mental mediumship and this extremely rare card-guessing faculty.

Lastly the writer would like to offer his sincere thanks to all members of the experimental team who co-operated so well over the past two years; not forgetting the mediums who without exception entered cheerfully into the spirit of the tests.

REVIEWS

CHALLENGE OF PSYCHICAL RESEARCH, A PRIMER OF PARAPSYCHOLOGY. By Gardner Murphy with the collaboration of Laura M. Dale. New York, Harper's, 1961. pp. XVIII + 297. \$6.00.

A book on psychical research by Professor Gardner Murphy is an event, as there are exceedingly few persons who combine an equal knowledge of the facts with an equal ability to discuss their theoretical implications. The book is welcome in itself, and doubly welcome as the forerunner of a larger work by him on the same subject. It is the twenty-sixth volume in the series 'World Perspectives' in which many authors of international repute deal with religion, philosophy, politics, science and art.

Professor Murphy who dedicates his book 'In gratitude to Frederic W. H. Myers, Eleanor Mildred Sidgwick, Walter Franklin Prince', disclaims any intention to survey the whole field, or 'to instill opinions in the reader', his aim being to show him what he believes to be serious classes of evidence for various kinds of psychic phenomena, and to explain why he believes 'that there are various challenges to be met by serious reflection.' He very truly says that the serious literature, consisting in the main of periodicals in several languages, of which those published by our own Society and the A.S.P.R. may be taken as examples, is hardly known at all, and he hints that the thoughtful inquirer gets little help from the ordinary organs of publicity.

His own exposition of serious evidence starts with the citation in reasonably full detail and the critical examination of a number of 'Spontaneous Cases' relating to veridical experiences, dreams, apparitions etc. of the kinds first systematically discussed in *Phantasms of the Living* (1886). The cases come from various sources. One is from *Phantasms*; the others are more recent, including three collected by the A.S.P.R. in its investigation parallel to

that recently conducted by our Society, two 'exceptionally vivid' and possibly precognitive dreams of Walter Prince, and a dream reported to Dr Ehrenwald by a patient whom he was analysing. In the three A.S.P.R. cases we are given the benefit of the questions put and the answers received by Mrs Dale in following them up.

Of the experiences described only one is a realistic vision seen by a waking percipient. This is perhaps the most challenging type, and it may be that Professor Murphy intends to illustrate it more copiously in the larger book which we eagerly await. Of the remaining cases four are dreams, one, the case from *Phantasms*, a tactile experience causing the percipient to wake up with a start, and one the hearing of the 'agent's' voice when the percipient was engaged on housework, and later the hearing of another, unidentified, voice during the night.

In a general way dreams are inferior to waking experiences as evidence for psi for several reasons. One is their frequency, which allows more scope for fortuitous coincidence between experience and event, and another that they are more likely to be mis-remembered. These weaknesses however do not greatly affect dreams of the exceptionally vivid type. But there remains the difficulty of symbolism. In Walter Prince's very curious dream of the severed head which continued to show activity, the argument for a significant connection with the suicide, intended at the time of the dream and occurring soon after, of a woman who laid her neck on a railway line, believing that her head when cut off would have a life of its own, depends largely on the prominence throughout his dream of hands and the fact that the woman's name was Hand. There were in the dream several other correspondences with the facts of the suicide but apart from the hands-Hand correspondence the case for a paranormal explanation does not seem to me cogent.

The chapter on Spontaneous Cases is followed by four on Experimental ESP and Psychokinesis discussion of which I gladly leave in the very capable hands of Dr West, and pass to the two concluding chapters entitled 'Survival' and 'An Interpretation'.

As regards survival he describes the material he proposes to discuss as follows:

'Within the space available we shall try to give evidence from three types of paranormal events: (1) Spontaneous telepathic and clairvoyant events happening to ordinary persons, in which there is a suggestion of post-mortem action or commerce of the deceased with the living; (2) mediumistic phenomena; (3) the complex technical

developments which carry the mediumistic studies to the challenging, perhaps insoluble, complexities known as "Cross-correspondences".

As an example of the first type he quotes the case (*Proc. 3. 95-98*) of a percipient who dreamt 'but with no vagueness as in common dreams' of a former employee, Robert Mackenzie, appearing to him and with urgency protesting that he was innocent of the charge made against him. Asked by the percipient what this charge was, Mackenzie replied 'Ye'll sune ken'. The order of events is important. The death occurred on a Saturday night, when Mackenzie drank poison in mistake for whisky. The manager of the factory where he worked learnt of the death on Monday, and wrote that day to the percipient a letter which he received on Tuesday, very shortly after the 'dream', saying it was a case of suicide. On Tuesday the manager learnt that the death was accidental and wrote the percipient a letter to that effect, received by him on Wednesday.

Mrs Sidgwick discussing the case in *Proceedings* says (3. 98) says:

'The coincidence is certainly curious, though it might, of course, have been stronger. It would be very interesting to know—though at this length of time [10 or 12 years] impossible, I fear, to ascertain,—whether at the time of the dream it was known to any living man that Mackenzie had not committed suicide.'

If anyone had that knowledge at that time it might be argued that the information in the dream came telepathically from that person, and was dramatized by the percipient's subconscious as a vision of and message from the dead man. A similar difficulty arises in many of the cases of 'phantasms' conveying information of things that have happened since the death of the apparent agent.

In discussing mediumship Professor Murphy lays special emphasis on the book-tests obtained through Mrs Leonard, which are some of the most baffling phenomena in psychical research. He quotes fully the remarkable test received by Mrs Talbot (*Proc. 31. 253-60*). As with several other book-tests chance-coincidence is not a reasonable explanation. Such cases *could* be explained by an ingenious combination of paranormal activity by living persons but only on the supposition of a *modus operandi* so roundabout and complex as to be barely credible.

It is the third type of evidence, the cross-correspondences, that Professor Murphy discusses most fully. In speaking of their 'challenging, perhaps insoluble complexities', he is not overstating the case. With these he associates the 'literary puzzles' characteristic of Mrs Willett's mediumship. Of the three cases

he quotes, 'Hope, Star and Browning' (*Proc. 22*), 'Lethe' (*Proc. 24*) and the 'Ear of Dionysius' (*Proc. 29*), the second is of a mixed type. The two mediums concerned in it were Mrs Piper and Mrs Willett, each acting independently of the other, and elements of correspondence between them are observable. But each in answer to the question 'What does the word Lethe suggest to you?' produced a string of references, the one to Ovid and the other to Vergil, that it is hard to attribute to their limited classical knowledge, but which would have been within the knowledge of the ostensible communicator, Frederic Myers. Ovid, it may be added, was a particularly good shot, as Myers had an admiration for that poet not generally shared by his contemporaries, in England at any rate. If the complexities of this kind of evidence remain 'perhaps insoluble', Professor Murphy has at least gone far to make them intelligible.

Summing up this section of his book Professor Murphy states with emphasis that recent developments in many branches of science make 'the conception of an independent soul recede more and more into the land of the utterly incredible and unimaginable', and that with some forcing even the cases he has quoted are not completely unambiguous evidence for survival, but that, struggle though he may 'as a psychologist, for forty-five years, to find a "naturalistic" and "normal" way of handling the material', he cannot do it. 'To me the evidence cannot be by-passed, nor, on the other hand can conviction be achieved . . . We need far more evidence; we need new perspective; perhaps we need more courageous minds'.

In his concluding chapter, 'An Interpretation', Professor Murphy deals briefly with the difficulty of establishing with certainty the sort of facts with which psychical research deals, and then proceeds to raise the questions of the psychological motives and conditions conducive to the occurrence of psi phenomena, and of what is the basic difference between normal and paranormal processes. I should in particular like to call attention to the paragraphs (pp. 282-4) in which he discusses frankly the difficulties created for the psychical researcher, not so much by deliberate fraud, as by the carelessness, bias, self-deception of other researchers. He says:

'This issue about what to do with incompetent and unethical procedures, both in general psychology and in parapsychology, has worried me considerably for some twenty-five years, and I do not pretend to see the light clearly.'

W. H. SALTER

This book, written by a distinguished scientist of great experience in the field, amply fulfills the promise of the subtitle and provides the most up to date and valuable primer on the subject that has so far appeared. Unlike so many popular surveys, which merely titillate the appetite with dramatic high-lights from investigations, usually selected to support the author's particular point of view about phenomena, this book gives full extracts from the original reports, thereby enabling the reader to appreciate the true status of the evidence.

This primer will prove interesting to experienced parapsychologists as well as to newcomers. We should all be interested to note which cases and which experiments Murphy selects as representative of the various aspects of the subject. Those of us who come close to immediate controversial issues, or are preoccupied with the pros and cons of some particular piece of research, are apt to lose sight of the total picture and to be too much swayed in our opinions by results of the moment. This primer is a powerful corrective. One of the most helpful features is the sense of proportion it conveys. Regardless of topic, and regardless of whether the evidence under consideration is experimental, anecdotal or theoretical, Murphy manages to preserve a balanced judgment, at once open to new ideas yet fully aware of gaps in the evidence or flaws in the conduct of research. The result is an excellent, impartial summary of the evidence for and about psychical phenomena that is free of propaganda on behalf of any particular philosophy or cult. One can well believe the sincerity of the statement that reads: (p. 284) 'I attempt to give the reader a sense of the difficulties, and of the relative conclusiveness or inconclusiveness of the scientific effort in psychical research, and he will reach his own conclusions.' He calls attention to the work done in the belief that it is at least worthy of being further pursued. The most that he is prepared to obtrude in the way of personal conviction is a brief statement in the final chapter: (p. 289) 'the areas noted by the psychical researcher are marked here and there with what appears to be facts, which are at least capable of gradually improved analysis and authentication'.

Although an acknowledged expert in experimental techniques, Dr Murphy shows a sensitive and lively appreciation of field studies and observations that are not yet susceptible to laboratory control. His unified approach exposes the nonsensical fallacy that parapsychology consists of two separate subjects, either the qualitative or the statistical, either case studies or experiments. In practice one approach makes no sense without the other.

Anecdotes have no values unless they lead to new ideas that can be verified by scientific experiment. Numbers in this context have no interest unless they relate to humanly meaningful phenomena. Either approach has dangers if pursued in isolation. The collection of testimony to incredible events, or the game of guessing cards and juggling with the scores, have some fatal fascination and may come to be carried on as ends in themselves. Murphy never loses sight of the purpose of both case studies and experiments, namely the attempt to discover laws and principles underlying as yet unexplained phenomena, and in this task he uses information from all available sources.

Turning now to the section of the book dealing with experimental work in ESP and PK, which is the somewhat artificial division relegated to the present reviewer, one notes the inclusion of six major investigations. (1) The Pearce-Pratt distance ESP tests. (2) Schmeidler's work on the effect of belief or scepticism upon ESP scoring. (3) The Anderson-White clairvoyance tests with schoolchildren. (4) The precognitive scores in the Soal-Goldney experiments with Shackleton. (5) Laura Dale's PK experiments at the American S.P.R. (6) The Forwald tests of 'PK placement', in which dice were rolled down a chute and willed to come to rest on one side or the other of a dividing line.

In researches (1) and (4) the scoring rates were so high as scarcely to require statistics to demonstrate their significance—though statistics were very useful in the discovery of secondary effects and variations in scoring. The only plausible alternative to an ESP interpretation seems to be deliberate fraud. Murphy comments (p. 81) 'We must, in raising these questions, remind ourselves that no scientist claiming unusual results can ever ask for immunity from such charges. If independent repetition were available of most of the major effects, the difficulty would not arise.'

In the other ESP experiments quoted, more especially perhaps in the Schmeidler work (2), relatively low scoring rates and the necessity for different groupings of results before significance becomes apparent allows scope for some statistical controversy. On this Dr Murphy makes the following interesting statement: (p. 99) '... my own feeling ... is that knockdown proof is not available by any statistical method, no matter how refined, and the main problem is to get experimental ideas in a form to permit ultimate repeatability ...'

It seems clear that Dr Murphy regards non-repeatability as the great stumbling block, the one unfortunate peculiarity that sets ESP experiments apart from other scientific work, hampers fur-

ther discovery, and prevents public acceptance of the importance of this research. At various times in the past it has looked as if a 'break through' had occurred and the goal of repeatability been virtually achieved. The S.P.R. pioneers working with Mrs Piper must surely have thought so, although they would not have expressed it in these terms. J. B. Rhine, in the first flush of his success with card calling tests, and Whately Carington, impressed by the results of ESP tests with a mass of unselected subjects guessing at the content of target drawings, both thought at one time that they had something repeatable. The Schmeidler method of dividing subjects into above chance and below chance scorers according to their attitude to the experiment seemed at one time to promise a means whereby any experimenter might be able to extract significance from the scores of unselected groups of people. The Anderson-White technique, using school-children as subjects and their class teachers as testers, and dividing the results according to teacher-pupil attitudes, offers, in Dr Murphy's opinion (p. 122) 'a pretty good promise of repeatability'. Once again, however, the rejoicing seems to have been premature. In a footnote on the same page Murphy adds that, at the proof reading stage, three further unsuccessful attempts at replication have come to his attention.

The inclusion of the PK researches, (5) and (6), may serve to revive some interest in dice throwing. The results of the Forwald tests (summarized in the table on p. 180) draw attention to the apparent dependence of PK scores upon which particular observers are present. In such tests the identity of the effective PK agent may not always be obvious. Dr Murphy comments that there is now too much evidence on record in favour of PK to warrant a 'wait and see' attitude that might have been justified when Rhine first brought up the matter. It seems, however, that 'the repeatable PK experiment is even harder to find than the repeatable ESP experiment' (p. 181).

D. J. WEST

GESCHICHTE DER PARAPSYCHOLOGIE. Buch I von A. Ludwig, stark umgearbeitet von Rudolf Tischner. Buch II von R. Tischner. Tittmoning, W. Pustet, 1960.

This book consists of two parts. The first is a second edition of the first section of the *Geschichte der okkultischen Forschung* (Pfullingen, 1922) by A. Ludwig largely revised and re-written by Dr Tischner and the second is a new edition of the former second section of the same work originally written by Tischner.

In the first part the author sketches very briefly the story of alleged paranormal phenomena occurring in antiquity and up to the nineteenth century or rather its first fifty years. The treatment of this period, however, is too limited in scope to serve any purpose than that of whetting the appetite of the reader for further information. Indeed, the whole book is much more an historical handbook than a history properly so called. In the second section the German speaking reader will probably profit by Dr Tischner's short descriptions of the phenomena and their investigators, but will find little of any detailed criticism of the cases discussed. For such readers the references to the main sources in the English language will be found very useful as will the German sources for the English student who reads German.

Some of the sections might have been well extended. For example the material on haunts and poltergeists is much too short; and the three pages devoted to the cross-correspondences are hardly sufficient to give the reader any idea of these complex phenomena.

The book is well produced and printed and, unlike so many books today, has an adequate index and a selected list of names of persons together with some of the books written by them.

E. J. DINGWALL

DAS MEDIUM CARLOS MIRABELLI: EINE KRITISCHE UNTERSUCHUNG. By Hans Gerloff. Tittmoning, W. Pustet, 1960.

This book is a German translation by Mr E. Engling of the book *O Medium Mirabelli* by Mr R. H. Mikulasch which was published in Santos (Brazil) in 1926 and is accompanied by an introduction, notes and commentary by Dr H. Gerloff.

The original volume is still one of the mysteries of psychical research. The identity of the author was for long in doubt but Dr Gerloff has come to the conclusion that he was, in part at least, Mr Mikulasch and I am inclined to agree with him.

Soon after the book was published attention was drawn to it in both German and French publications but it was not until 1930 that a summary of the book, translated from the Portuguese by the present reviewer, was printed in the July issue of the *Journal of the American Society for Psychical Research*. In that review I said that it was a case 'in which the most extraordinary occurrences are recorded, so extraordinary indeed that there is nothing like them in the whole range of psychical literature' and I have had no reason since then to change my opinion.

More versatile even than D. D. Home, Mirabelli is credited with

the most astounding phenomena such as full-form materializations of persons recently dead: levitations both indoors and in the open air: movements of objects without contact: automatic writing in many languages and other phenomena too numerous to mention.

One account of a materialization will suffice to give the reader some idea of what occurred. During the course of a sitting a bell which was on the table rose ringing into the air. The medium awoke from his trance and told those present to look at the figure of an old man enveloped in a white mantle. While he was speaking there was suddenly a loud noise and to the amazement of the sitters they found amongst them an old man as described by the medium. Two of the sitters recognized the phantom as that of a physician recently deceased and photographs were taken while the form was examined for some fifteen minutes by two medical men who stated that it appeared to be a normal human being. After the examination was completed the figure was seen dissolving away from the feet upwards until only the upper part of the body remained floating in the air. One of the medical men who had examined the figure rushed forward exclaiming 'But this is too much!' and seized the half of the body floating in front of him. Uttering a cry he sank unconscious to the ground, while what was left of the phantom disappeared instantly. The sitting was closed and the doctor carried from the room and restoratives applied. When he recovered he told the sitters that what he felt was a spongy, flaccid mass of substance and that then he experienced some kind of a shock and fell to the ground.

Among those from Europe who actually saw Mirabelli some years after the appearance of the book were three members of the S.P.R., Professor Driesch, Mr T. Besterman and Miss May Walker, but all three saw nothing worth describing here. None of them brought back any information which helped to solve the mystery surrounding the case; and I am not aware that any of those persons who are stated to have been actually present at the more striking phenomena, such as Dr A. Mendonça who seized the phantom or Dr O. de Moura who examined another figure for half an hour, were interviewed or had statements taken from them.

At the end of my article I said that I found myself at a total loss to come to any decision whatever about the case. It is clear that the most important witnesses should have been seen and asked for their opinions about the case, especially as to the phenomena that they themselves had observed. Why this was not done has never been explained and now it is probably too late. Dr Mello

in his *Mysteries and Realities of this World and the Next* (London, 1960) states that the whole affair ended in a ridiculous and banal manner, but gives no evidence for this assertion and no references whereby it could be checked.

Dr Gerloff, in his commentary on the case, is, if I understand him rightly, inclined to believe in Mirabelli's astonishing phenomena and by editing this German translation he has done a most useful service for those unable to read the original Portuguese. But as would have been expected he has not been able to do much to clear up the mystery and it is doubtful if at the present time it could be satisfactorily accomplished by anyone outside Brazil, and even there Dr Mello, who attempted to make some inquiries, was, he says, only able to obtain 'garbled information'. The case remains another of those unsolved mysteries with which the history of parapsychology abounds.

E. J. DINGWALL

WILLIAM JAMES ON PSYCHICAL RESEARCH. Compiled and Edited by Gardner Murphy and Robert O. Ballou. New York, Viking Press, 1960. 322 pp. \$6.00.

William James (1842-1910), philosopher, medical man, professional psychologist, and a giant among intellectuals, brought to the study of psychical phenomena an unusual combination of virtues. While a passionate devotee of experimental method and cautious scientific hypothesis, he was at the same time a powerfully imaginative thinker who overcame the prejudices of his day in his recognition of the potential scientific importance of the unexplained phenomena of hypothesis, mysticism and mediumship.

James' writings on psychical research, here collected together with brief but informative editorial comment, make refreshing reading. They are unsurpassed for verve, clarity and swift penetration to the essential problems, most of which, unfortunately, remain all too topical.

The best known practical contribution that James made to the subject was the discovery of the trance medium Mrs Piper. In his first report on her (1886) he writes; 'My own conviction is not evidence, but . . . I now believe her to be in possession of a power as yet unexplained.' He retained that conviction to the end, but in his most substantial contribution to Piper studies, the 'Report on Mrs Piper's Hodgson-Control' (1909), he set out with unusual candour the difficulties of evaluating some of her material, and concluded with the comment that the Hodgson case

was 'vastly more leaky and susceptible of naturalistic explanation' than the earlier Piper records.

Not content to limit his attention to the usual repertoire of spiritualistic phenomena, James extended his studies to include mystical and religious experiences. His book *Varieties of Religious Experience* is still a standard work. This breadth of interest greatly increased the value of his assessments and discussions of psychical research. In his 'Final Impressions of a Psychical Researcher' (1909) he confessed that after twenty years of study: 'I am theoretically no "further" than I was at the beginning; and I confess that at times I have been tempted to believe that the Creator has eternally intended this department of nature to remain *baffling*, to prompt our curiosities and hopes and suspicions all in equal measure, so that, although ghosts and clairvoyances, and raps and messages from spirits, are always seeming to exist and can never be fully explained away, they also can never be susceptible of full corroboration.'

Half a century later this sentiment of puzzlement and frustration evokes a feeling familiar to anyone who has for long tried to battle with these problems.

D. J. WEST

THE MYSTICAL LIFE. By J. H. M. Whiteman. London, Faber & Faber, 1961. 30s.

This book considers the phenomena of out-of-the-body experiences, or separation, from a mystical point of view and deals with the moral and spiritual values, an aspect in psychic research which one rarely meets. Professor Whiteman's prose is very clear once one grows accustomed to the mystic's phraseology. Examples are most comprehensive, although some of the well known cases one had always accepted as more evidential than mystic, though the margin between mystic intuition and provable reality must be very narrow. Let us not forget that what the author calls separation must possess a more factual base. Since science now views the physical world as energy and insubstantial and envisages the possibility of sub-atomic energies rising to unknown limits, yet not significant to us, can we hold that there is such a thing as non-physical space? Accepting this verdict, as we must, it but renders these other worlds and bodies more factual for the mystic's experiences. We can now invest them with the mantle of reality and the accolade of truth. Except for enhancing them with a foundation of actuality, this need not in any way affect the visions of the mystic. Whether we accept the contents of this

book as mystical or factual is surely for ourselves alone, if we acknowledge the differences in the terms the author employs. This book is of very great value and is bound to make its mark. Professor H. H. Price has written an excellent introduction.

JOHN N. EAST

THE VITAL SENSE. By H. G. Heine. London, Cassell. 30s.

According to Dr Heine all psi phenomena, including physical mediumship and pre-cognition, have a physical explanation. She believes that the macrophages or amoeboid cells of the reticulo-endothelial system act as transmitters and receivers and that within the organism they form what she calls a chemical communication system. When excited they produce 'emanations, radiations or waves' which carry information to suitable recipients. The recipients' macrophages serve as a kind of primitive and diffuse sense organ which transfers the chemical stimuli to the brain where they are translated into consciousness. This is, very briefly, the basic theory which would account for telepathy, and the author develops it with much ingenuity to include every other kind of psi event. Cases are cited, many from 'Phantasms of the Living' and others from modern sources, to support her views as she unfolds them, and it is evident that she is familiar with the literature of psychical research. In her own words she has 'no doubt whatsoever that the physiologists have located the archaic communication system which is responsible for the information we call clairvoyant and telepathic'. Does she carry this conviction to the reader? The answer must regretfully be 'no'. In the first place the author is extremely vague about the kind of emanations or radiations which the macrophages may produce. She appears to think that in some circumstances they could be chemical emanations and in others electro-magnetic waves, and she has no suggestions to offer as to how the agent's information could be encoded in these emanations or waves, such as, by analogy, pictures are encoded in the electro-magnetic waves of a television transmitter. Secondly, with such a vast number of cases to choose from, it has not been too difficult to pick those which support a particular theory. Finally in her endeavour to accept all psi phenomena as having been caused by macrophage activity she spoils her case. Instead of trying to cover the whole field, her ability to marshall facts and express them in clear, readable English, would have served the cause of psychical research better if she had concentrated on a more detailed examination of the physical possibility of 'macrophage-communication'. If macro-

phages do send out emanations or waves, modern techniques should make it possible to detect them and determine their characteristics.

C. F. C. SPEDDING

THE JOURNAL OF PARAPSYCHOLOGY, XXIV, 3. Sept. 1960, Durham N.C.

Dr Rena Ratte and Mrs Greene have further explored the use of a game situation in PK tests which was originally used by Dr B. M. Humphrey. Their over-all results are significant although no evidence is given that these are better than would have been obtained by the same subjects in the more usual type of laboratory test. They further claim to have shown a correlation between success in PK and self-rating for luck. This, however, is based on a misuse of the χ^2 test. This is applied to a 2×2 table whose entries are scores and not numbers of cases. No reliance can, therefore, be placed on this finding.

Dr J. G. Pratt summarises 'The case for Psychokinesis' and provides a judicious survey of the experimental literature. This will supply a long-felt need amongst parapsychological students and research workers.

Carroll B. Nash has done an experiment to determine whether clairvoyance tests with students as experimenter and subject showed the same superiority in score when subject and experimenter liked one another as has been demonstrated by Anderson and White when school students were tested by their teachers. A superiority in score where the pairs liked one another over the scores when they disliked one another survives a recalculation of χ^2 which is made on the last page. This cannot, however, properly be treated as evidence for the hypothesis under test (that the causative factor is the liking). As evidence for this being the case it would have been necessary to make a χ^2 test in which individual pairs were treated as units (or some equivalent statistical method). Certainly one can say that these results are consistent with the hypothesis tested. It is not shown that they are inconsistent with the falsity of this hypothesis.

H. H. Price's lecture on 'Mediumship and Human Survival' contrasts the 'possession' theory of mediumistic phenomena commonly held by spiritualists with the 'skeptical' explanation put forward by psychopathologists. While agreeing that it is difficult to find evidence absolutely excluding the skeptical explanation (if sufficiently extensive ESP powers are attributed to the medium), there are phenomena which present great difficulty to such an

explanation. He concludes that there is, at least, a chance that we may survive, and that this chance is enough to make it necessary to take it into account in estimating our moral responsibilities.

Professor Price has also a review of *Our Experience of God* by H. D. Lewis in which some of the religious implications of the paranormal are discussed.

THE JOURNAL OF PARAPSYCHOLOGY, XXIV, 4. Dec. 1960, Durham N.C.

R. J. Ratte reports investigations comparing PK performances under competitive and non-competitive conditions. One only of the tests under competitive conditions showed significant results ($P=0.002$). This becomes somewhat less impressive when it is treated as the selected best of a number of observations. It is, however, good enough to support Dr Ratte's very moderate suggestion that competitive forms of PK test look the most promising. We are still far from realisation of the hope to find a form of PK test that can be relied upon to give consistently good scoring.

J. G. Pratt's article on 'Taking Stock in Parapsychology' is his presidential address to the Parapsychological Association. He considers how a parapsychologist of the mid-twenties would view our present position. Dr Pratt feels that he would be pleased to observe the progress made—new experimental and statistical methods of research and new problems, such as precognition and PK. One may suggest that he might also be disappointed by the little progress that has been made in solving some of the old problems. One of these is the question of survival of death which is now receiving new attention. The next two articles are concerned with it.

The first of these is by W. G. Roll on 'The Contribution of Studies of "Mediumship" to Research on Survival after Death'. This summarizes the old evidence on this topic and discusses some of the work going on at present, with a look forward towards the needs of future investigations.

Professor J. B. Rhine discusses 'Incorporeal Personal Agency: the Prospect of a Scientific Solution'. He considers that the situation justifies the launching of a new attack on the IPA (Incorporeal Personal Agency) problem. The matter is urgent because the increasing influence of mechanistic philosophy is making it more and more difficult for scientists to see this as a real issue. He suggests that it should be regarded as part of a wide field of enquiry (including the study of psi phenomena) directed towards obtaining evidence as to non-material factors in man. He also discusses the possibility of planning research

which takes survival for granted and tries to elicit spirit collaboration in planning the research. Either success or failure in this aim would be informative. There is another possible line of investigation not mentioned by Rhine but which is suggested by the line of thought he has opened up. It might also be profitable to investigate alleged communications by IPAs who do not claim to be surviving human personalities (as reported, for example, by Swami Omananda Puri in *The Boy and the Brothers*).

There are abstracts of the papers read at the Third Annual Convention of the Parapsychological Association held in New York last September.

THE JOURNAL OF PARAPSYCHOLOGY, XXV, 1. March 1961, Durham N.C.

H. Forwald reports a PK self-experiment in which he has used as target the die face instead of his more usual target of die position. He obtained highly significant deviations from chance expectation—an average of about 6% over MCE. A secondary purpose was to study the effects of die size and of the hardness or softness of the surface on which dice were thrown. The highest deviations (about 10% over MCE) were obtained from small dice (5 mm.) thrown on to a hard surface. There are also reported position effects but these must be treated with caution in the absence of information as to dice bias.

The Editor has proposed various theoretical questions discussed in a Forum on 'Physicality and Psi'. Contributors are Professor Scriven, Broad and Burt and Dr Pratt. There is some difference of opinion between the disputants as to whether psi can be said to be non-physical. Much of this difference seems to be due to disagreement as to what is meant by being non-physical. Many of the disputed theoretical questions about psi may be more hopefully tackled by clarification of the question than by discussion of the answers. It may be that the question of physicality needs splitting up into a number of different questions about some of which there will be no dispute as to the answers.

Many of the same questions are discussed by Professor Rao in an article on 'Some Theories in Parapsychology'. The author gives a brief account of eight theories that have been put forward in parapsychology with criticism of their defects. He adds a new one of his own; that psi (on its cognitive side) is better understood as a form of imagination rather than as a form of perception. This suggestion is to be welcomed; it may turn out to be fruitful. The earlier part of Professor Rao's article seems to rest on a mis-

conception of the place of theories in a developing science. They are suggestions as to what may be fruitful lines of research to be tested in the laboratory, not on the debating platform. For this purpose we need many of them, and the parapsychologist who suggests a new one is doing better service than by finding fault with old ones. The defective ones will be eliminated by their failure to suggest fruitful lines of research. Most of the theories that Professor Rao mentions seem to be in process of being eliminated by this test.

R. H. THOULESS

MAN THE IMMORTAL. By John N. East. (Forewords by Dr W. Y. Evans-Wentz and Miss Geraldine Cummins.) London, The Psychic Press, 1960. 231 pp. 21s.

In the course of his ambitious attempt to correlate the findings of Western science with those of Eastern mysticism, Mr East has assembled a selection of stimulating ideas from many sources, whose relationship to one another is worth consideration. His principal theme is reincarnation, and he attempts to construct a theory of the relationship between mind and matter in support of this doctrine.

It seems doubtful, however, whether the findings of modern science really strengthen Mr East's contention that mind is the sole reality. Solipsism has always been a tenable philosophical point of view (whatever some modern linguistic philosophers may say to the contrary), and no conceivable scientific discovery could make it either more or less so. And can we so readily equate the statement that mind is the sole reality with the Buddhist view that all is illusion? In line with the former belief, the term 'mental construct' is constantly substituted for 'material object' or 'body'; but this kind of re-wording of our description of the world does not throw any fresh light on the structure of that world—a point perhaps implicit in the author's willingness to permit us mentally to construct all the entities of the physical sciences.

This may also account for his acceptance of a quasi-physical explanation for the experiences of 'astral projection', in preference to the view that they resemble dreams in being symbolical expressions of psychological events. Certainly the physicist might query his suggestion that the astral body may be 'constituted of the sub-atomic energies, as the incarnate body is of the more gross atomic' on the grounds that it overlooks the complex theoretical relationship between macroscopic physical entities and their atomic and sub-atomic constituents. Incidentally, we may

regret that Muldoon and Carrington have been followed so closely in the discussion of these experiences.

But those interested in reincarnation should find much of value in this book, which will suggest to them many fascinating fields of exploration.

MARGARET EASTMAN

MAN: THE KNOWN AND UNKNOWN. By John Langdon-Davies.
London, Secker & Warburg, 1960. 226 pp.

John Langdon-Davies is a well known psychical researcher, and has written many books. This latest book of his may not be considered by some to be his best yet; however, it makes enjoyable reading and does justice to the subjects discussed.

There are nine chapters, of which the first four deal with the known facts about Man and the chief scientific developments which have revealed them. Under the headings: What is science, What is the body, and Man in evolution and Outside, it is argued that science, as opposed to theological and philosophical hypotheses, has taught man about himself and his evolution in the Universe. There is, nevertheless, some philosophy in the author's predominantly scientific argument.

Although scientific explanations of what is man are favoured by the author, attention is drawn to the limitations of present theories in dealing with basic problems such as what is mind? It is argued by Mr Langdon-Davies that human nature cannot be studied solely in the terms of the struggle for survival, and he says that man has probably reached the end of physical evolution and any further development towards perfection must be in the realm of the mind. He writes: 'There is a study of man outside Natural Selection by the Survival of the Fittest to Survive.'

The second section of the book is of greater interest to the psychic researcher in its detail. In chapter 5 'Man's hidden creativeness' is discussed under the headings: Man's Unconscious, Hypnosis, Suggestion and Experiment in Depth; the main theme of the discussion is that man has greater potentialities than are revealed by his conscious thoughts. Some interesting observations are made about the hidden time sense and mescaline. In chapter 6 dealing with 'Telepathy' the Spanish experiments in ESP figure prominently. Some personal experiences with mediums are related which, although interesting, are not wholly significant. Some fairly well known cases reported by other investigators are also described.

Some interesting comparisons between ESP and Prayer are

made in chapter 7; the author suggests that the Christian lost in prayer is in the same psychological condition as the Buddhist receiving wisdom, and the medium composed to become entranced. The need for physiological preparation as exemplified by fasting is examined. The author fails to see why the psychic researcher can expect to achieve uniform, predictable, frequent evidence of ESP without any physical and mental preparation. The work of Max Freedom Long comes in for some sharp and pointed criticism.

The last chapter is devoted to an examination of the survival problem. 'There are no compelling reasons for or against a belief in survival and so we must pass to the field of scientific research proper; that is, to the discovery, collection and interpretation of facts', says the author. All in all the book presents the known facts about man and some of his paranormal faculties in a well balanced manner, and urges the continuation of a scientific approach to that which is still unknown, without superstitious credulity. Langdon-Davies has something worthwhile to say and should be read.

A. D. CORNELL

THE UNCONSCIOUS MIND. By Kenneth Walker. London, Rider, 1961. 21s.

This book is a brief introduction to some of the phenomena studied by psychical researchers—chiefly the mental phenomena. Mr Walker's general drift is familiar. Following the lead of F. W. H. Myers, he tries to demonstrate that the potentialities of our unconscious minds are far greater than those of our conscious minds, and even that our unconscious minds may perhaps merge with those of our neighbours.

The merits of the book are its broad scope, and the clarity with which it is written; the author never lapses into polysyllables, even when handling topics where the temptation to do so is strong.

Unfortunately it has serious defects. Mr Walker has a regrettable tendency to use arguments from authority. Thus he believes himself that mind and matter are two aspects of the same thing; but he tries to convince his readers of this chiefly by quoting the conclusions of Russell, Eddington, Whitehead and Sri Aurobindo. He dismisses Mr Spencer Brown's statistical views on the grounds that Dr Soal has assured him they are wrong.

The book has also many factual errors; some are trivial, but some are serious. To illustrate both kinds: he says that at the

end of the last century a special committee of scientists and physicians returned a very unfavourable verdict on hypnosis. Presumably he refers to the BMA report of 1892; but this returned a *favourable* verdict. He says that Descartes was the originator of the 'two clocks' theory. He moves Duke University from Carolina to California.

It also contains an almost unbelievable number of spelling mistakes—for example 'Sidgwick' becomes 'Sedgwick', 'Tyrrell' 'Tyrell' and 'Carington' 'Carrington' throughout. These small errors are symptoms of a general laxness of thought.

ALAN GAULD

Too MANY GHOSTS. By Paul Gallico. London, Michael Joseph, Ltd, 1961. 272 pp. 16s.

This is a work of fiction based on the records of paranormal happenings in the Society's publications, which, some critics, rightly or wrongly, also regard as fictional. Paradine Hall, in Norfolk, had a surfeit of ghostly manifestations—poltergeists, of both the merely mischievous and the more malevolent varieties; the legendary nun haunting the corridors; sleepers awakened with cold clammy fingers clasping the throat; candles mysteriously extinguishing themselves; a dead rabbit with the wire noose still around its neck suddenly appearing on the dinner table; a harp, destined by legend to play by itself, making its sweet but fatal music heard throughout the house; apports of stones flung through closed windows without breaking them—all sufficiently alarming to persuade Lord Paradine to summon Alexander Hero of the S.P.R. to investigate and exorcise the bevy of ghosts.

Mr Hero after much puzzlement manages to debunk the paranormal nature of the phenomena, if not altogether convincingly. Thus he dismisses the more violent poltergeistic events by a whole-hearted acceptance of Underground Water Theory. He discovered the phenomena coincided nicely with the times of high-water at Yarmouth. How a high tide at the coast several miles away could manage to wreck completely the contents of a single upper-storey room and leave all other rooms intact Mr Hero does not try to explain. I doubt also if his solution of the harp that played by itself is altogether convincing. Would the device used have produced a sufficient volume of sound, coming from a closed room, to be heard considerable distances away?

He soon discovers the inevitable 'naughty little girl' to explain some of the other poltergeist behaviour and he also tracks down

two other inmates who, for one reason or another, add to the ghostly effects. It is all very exciting and written in Mr Gallico's inimitable style. It is even instructive and all trackers-down of things that go bump in the night would benefit from its perusal.

One is intrigued to attempt to discover if the author in his creation of Alexander Hero had any particular researcher of the S.P.R. in mind? I have been unable to make any certain identification. When one reads of Mr Hero's extremely handsome appearance, and also of the irresistible fascination he exerted on all members of the opposite sex, the field of search is very much restricted.

G. W. F.

ITALIAN SOCIETIES FOR PSYCHICAL RESEARCH.

In the S.P.R. *Journals* for June and September, 1958, the activities of the various Italian Societies were reported and reference made to the split which had occurred between the S.I.P. and the A.I.S.P. It is gratifying to note that this split has now been closed and the event has been celebrated in a Conference held in Rome in November, 1960, at which all three major societies took part. The addresses given at this Conference have now been published by the S.I.P. in the form of a Symposium.

The Conference was opened by Professor Schepis, the President of the S.I.P. who expressed his satisfaction at the collaboration of the three societies. This Dr Occhipinti, President of the A.I.S.M. cordially endorsed. The greater part of the time of the Conference was occupied by a consideration of the validity of the inductive and statistical methods to the phenomena of parapsychology.

Professor Egidi referred to the Conference at Florence in May, 1957, when it was agreed that they must pursue the 'scientific method' though he confessed that he was not without doubts concerning what exactly was the scientific method in parapsychology. Dr Marabini examined the recent criticisms of the statistical method and concluded that it was a defective instrument for arriving at proofs which the scientific world would accept. Dr Genovese agreed with this conclusion and said that to argue that because this method had been successful in other sciences it was applicable to parapsychology was to make a false analogy. Dr Cassoli, President of the C.S.P., said that all the statistical method could do was to state that the result was not due to chance, but it could not state that it was due to ESP.

The most we could say was that it was probable that some unknown faculty of man had intervened, which, for the moment, we might call 'factor X'. Some day it might be proved that 'factor X' did not exist, but we must run this risk and continue to experiment with subjects of different potentialities and under the influence of different drugs until we arrived at greater precision. He believed in the existence of 'factor X', but even if it should be proved not to exist, it would not be the first time that men had spent their lives following an idea which was eventually proved false. And the study might help in the elucidation of certain irrational traits in man's behaviour, so that, anyhow, the time would be more profitably spent than in discussing the sex of angels.

Another recent publication in Italy is a special issue of *Parapsicologia* (the organ of the C.S.P.) in March, 1961, devoted to recent researches on the subject of 'Unorthodox Healers'. Dr Cassoli draws attention to the fact that there are 10,000 such healers in Italy (despite the legal penalties involved), 30,000 in France and 35,000 in Germany. But he invites us to remember that it is only since Hippocrates, the Father of Medicine, that medicine has been separated from magic, and that the process is a very slow one since many people still prefer the intimate rites of the healer to a written medical prescription. He gives the psychological reasons for this. Dr Inardi also has an illuminating article in this issue where he discusses thoroughly the stimulus of suggestion.

M. T. HINDSON

THE HIDDEN SPRINGS, AN ENQUIRY INTO EXTRA-SENSORY PERCEPTION. By Renée Haynes. London, Hollis & Carter, 1961. 264 pp. 30s.

It is no secret that Renée Haynes is Mrs Jerrard Tickell, a well-known member of the Council of the Society. If I interpret the title rightly, the 'hidden springs' are psi-gamma and psi-kappa; and they are hidden because they well up, as it were, in a great variety of apparently unrelated phenomena, from the behaviour of migrating birds to the visions of saints and prophets. The main aim of the book is to supply a missing chapter in the History of Ideas by giving a historical description of human beliefs and emotional attitudes about psi from very early times to the present day. Something is also said about the social customs and institutions (e.g. the College of Augurs in Ancient Rome) in which these beliefs and attitudes have been embodied. One interesting feature of this historical survey is that it is written

from a Catholic point of view; Mrs Tickell belongs to the small but distinguished group of Catholic psychical researchers. Thus we find a fairly detailed account of the views of St Thomas Aquinas about psi-cognition in Chapter VII (though I wish we had been given more detailed references to his voluminous writings); and in Chapter VIII there is a discussion of Catholic attitudes towards psi in the 18th century, a topic which will be quite new to the majority of Mrs Tickell's readers. I think they can hardly fail to be impressed by the enlightened views of Prosper Lambertini (Pope Benedict XIV) and they will certainly be delighted by the engraving of St Joseph of Cupertino in flight, reproduced opposite p. 192. I may add that it gives great pleasure to at least one reader of this book to find that the contemplative life is regarded throughout as something that needs neither defence nor apology.

Mrs Tickell's approach to psychical research is the traditional one, which stresses the close connection between psychology and psychopathology on the one hand and the study of psi-phenomena on the other. She makes constant use of the conception of the Collective Unconscious, and she adopts the Jungian view that poltergeist phenomena are manifestations of mental conflict, though she makes the interesting suggestion that the conflict may be transferred (telepathically?) to someone else, e.g. to a child, who thereby becomes a psycho-kinetic agent. A similar suggestion is made about the transferability of accident-proneness in the appendix on the Evil Eye at the end of the book.

Mrs Tickell's approach to our subject is traditional in another way as well. She attaches great importance to spontaneous cases. At least that is the natural interpretation of a remark on p. 109. 'I am convinced' she says 'that in the study of psi, which is a function of living beings, the methods of the field naturalist, the bird-watcher, the zoologist, the anthropologist are of even more value than those of experts in the physical sciences.' Throughout the book, spontaneous cases are the ones which she mainly uses to illustrate her argument. Some of them are old (the Wesley case, the drummer of Tedworth) but others are new. Among the best is the telepathic—or clairvoyant?—dream about Mitzi the cat on pp. 56–7, and the cases of child-parent telepathy which the reader will find in a rather unexpected place, near the beginning of the chapter on 'Sage, Clairvoyant and Magician in Asia' (pp. 109–11). There are also some very curious stories about animal apparitions on pp. 33–4, some of them quite recent. If Mrs Tickell is right, the Hound of the Baskervilles was not a pure invention. This repellent and terrifying creature had at least a hallucinatory proto-

type; and this recurrent canine hallucination, in its turn, was partly the cause and partly the effect of ancient legends about the Hound of Odin.

The bulk of the book, as has been said already, is concerned with the History of Ideas. But there are also two chapters of a more theoretical kind, and I shall make a few remarks about them first. One is on the relation of psi to biology (Ch. II, the Psi-function in Animals). I will only venture to make one comment on the main argument of this chapter. Before we offer a paranormal explanation of bird migration, we must make quite sure that all normal explanations have been shown to be inadequate; and unfortunately ornithologists have a disconcerting way of inventing new ones. The technique of tracking flocks of migrating birds by radar, which only came into use fairly recently, may lead to some surprises. Apparently there is already evidence that some species of migrating birds, not otherwise nocturnal in their habits, usually cross the North Sea by night, and that they navigate by means of the stars. It has been found that if the sky becomes overcast after they have started, they completely lose their way.

The other theoretical chapter is on the relation of psi to theology (Ch. VI, Psi and Miracle). Miracles are obviously a very awkward topic for any devout person who is also a psychical researcher, and we must congratulate Mrs Tickell for grasping the nettle so boldly. If all the New Testament miracles were completely explicable in terms of psi-processes, they would no doubt still be miraculous in the etymological sense ('wonderful events'), and they would still be 'mighty works', a phrase sometimes applied to them by the New Testament writers themselves. But there would be nothing supernatural about them. Psi is a part of Nature. Paranormally-caused occurrences, however extraordinary, are instances of natural laws which we do not yet fully understand, just as thunderstorms are instances of natural laws which our ancestors understood even less. Can we draw a firm line and say 'here the paranormal ends and the genuinely supernatural begins'? Mrs Tickell claims that we can.

So far as I can see, she uses two principles for this purpose. The first is that a miracle cannot be explained by psi if it involves the coming into existence of new matter (e.g. the restoration of a lost limb, or the 'multiplication of food' as in the miracle of the Loaves and Fishes). I think this commits Mrs Tickell to the conclusion that the alleged psi-phenomenon of 'materialisation' is *a priori* impossible. I admit that the empirical evidence for materialisation is at present pretty weak. But can we be absolutely sure that it will not become stronger some day? How very awkward that

would be for theologians! The other principle is that the restoration of a dead human organism to life cannot be explained in terms of psi, at any rate if the organism has been dead for a considerable time (an example is the Raising of Lazarus). We must admit, I think, that there is nothing in our present knowledge of psi to suggest that any such occurrence could be explained in terms of psi-processes. If we accept the evidence, perhaps we shall have to admit that this is indeed a supernatural event, only explicable by a special act of Deity. But I think a good deal depends on our conception of the relation between mind and body. Mrs Tickell, if I understand her rightly, accepts some form of the dualistic-interaction theory, though I doubt whether St Thomas did. Now if the restoration of mind-body interaction after it has ceased is a supernatural event, can we avoid saying that its origination is also a supernatural event? In that case the birth (or rather perhaps the conception) of any human infant would be as supernatural as the Raising of Lazarus. This is a rather surprising conclusion.

I turn now to the historical chapters—Mrs Tickell's historical survey of human beliefs and attitudes about psi. The main point she wishes to make is that in all ages man has been reluctant to acknowledge that the source of all paranormal phenomena is in ourselves, that the 'springs' of them are hidden in the unconscious part of our personalities. For example, many different sorts of 'Rorschach objects', as she calls them, have been used from time to time to exteriorize psi-impressions and make them accessible to consciousness (marks on the livers of slaughtered sacrificial animals, the patterns made by sticks thrown on the ground, tea-leaves, lines on the palm of the human hand, etc.); and there has been a recurrent tendency to suppose that these objects have an inherent magical significance of their own, and that rules can be formulated which would enable a well-trained diviner to infer, say, from marks on the liver what the results of a battle were going to be. The same neglect of the maxim *gnothi seauton* led men in later ages to suppose that psi-phenomena must have an electrical or magnetic origin.

But though there is much in these chapters which will interest Mrs Tickell's readers and much that will be new to them, I do not think we can be altogether satisfied with her treatment of the ancient Mediterranean world (Ch. IV and also Ch. VII). She has almost nothing to say about the Greeks of the classical period; there is one brief reference to the oracles of Delphi and Dodona, and two sentences about the daemon of Socrates (or rather about Plutarch's explanation of it) and that is all. The beliefs and prac-

tices of the ancient Romans are treated much more fully. But sometimes it is not altogether clear which period in the long history of Roman civilization she is discussing; and in her discussion of the beliefs and attitudes which prevailed in the Roman Empire, she takes no account of the terrible 'time of troubles' in the middle years of the third century A.D. which very nearly brought western civilization to a premature end. Nor does she seem to realize that in the century of (relative) tranquillity and vigorous intellectual activity which followed, the period of Diocletian, Constantine and his successors, the Roman world was very different indeed from the empire of Augustus or of the Antonines, not only in its social and political organisation but also in its beliefs and its outlook.

I cannot resist adding a word in conclusion about her treatment of the Roman augurs. It is to be noted that an augur was also sometimes called an *auspex* (hence our word 'auspicious') and *auspex* means literally 'a bird-watcher'. And it is not true that the only birds in which the augers took an interest were tame chickens, as she seems to suggest. They paid great attention to wild birds too, and were indeed the first bird-watchers. Any student of psi who is also a bird-watcher must surely have a warm place in his heart for these ancient colleagues of his. The most celebrated success of this agreeable method of divination, the case of the Twelve Vultures, should at least have received a mention in Mrs Tickell's book. According to the story, if we can believe it, twelve vultures were observed when the auspices were taken at the time of the foundation of Rome. The interpretation was that each vulture represented one century, and that the newly founded city would flourish for 1200 years. The Roman Empire in the West came to an end about 12 $\frac{1}{4}$ centuries later.

H. H. PRICE

CORRESPONDENCE

Enquiry into Spontaneous Cases Report

SIR,—I would like to be allowed to make a few remarks in connection with the 'Report (1959) on enquiry into spontaneous cases', printed in *Proceedings S.P.R.*, 53 (1960), pp. 83–161.

I feel that the line of argument adopted, for instance, by Mrs Heywood in her paper reviewing Celia Green's 'Analysis of spontaneous cases' and which gives one the impression (pp. 94–5) that influential members of the S.P.R. seem now to be content to lower their sights where the standards of evidence are concerned and are willing to accept and work with case-material

of a lower evidential grading, can only be detrimental to the future status of parapsychology as a scientific discipline. Strangely enough, this unconcern regarding high standards of evidence displayed throughout the report is in sharp contrast with the view professed by the great majority of the delegates attending the Cambridge Conference in 1955, which Conference actually instigated the enquiry into spontaneous cases in England and in other countries. And it was because of the fear felt by that majority that looseness in the application of evidential standards would surely undermine the scientific foundations of parapsychology that the Cambridge Conference decided to nominate a Committee to guard against this. It is this Committee that Mr Salter mentions on page 91. It is, therefore, with great regret that I now find that the compilers of the present report have thought fit to step out in a direction which must lead ultimately to the sapping of the confidence in parapsychological methods, of which many of the delegates of the Cambridge Conference were so much afraid.

There is, I believe, and this is another point I would like to raise, no sense whatever in drawing up all kinds of graphs and tabular forms, and putting the data through an electronic computer for purposes of research, if we know nothing with certainty about the significance of each single item to be taken into account. One example, I believe, will suffice to illustrate my point of view.

In the Report (pp. 147-8) *case G.91(a)* is classified as a case of precognition and of telepathy. I am, however, of opinion that there is no real evidence that either the mother (*a*) had a truly precognitive impression, or that the young boy, her son (*b*), experienced a telepathic crisis apparition. It is stated that Mrs H. had a strong impression that her deceased mother was standing in a certain part of the room, and that at that very moment she felt an intense desire to go home to Liverpool where her father and sister were living in the same house. This was all. Four days later the father suddenly died at the tea-table. Now, how are we to know that the strong desire to go home was meant as a precognitive message that the father was going to die in a few days time? If a case of precognition is going to have any value it should be sufficiently detailed so as to cut out all possible ambiguity. In this case there are no sure indications that the desire to go home signified that the father would shortly die. It could mean a great many other things in connection with the house in Liverpool. The impression of Mrs H.'s dead mother's presence might also have various meanings not connected with the future death of the father. The investigator, presumably,

did not trouble himself to enquire about this part of Mrs H.'s experience. This is a pity. For, if Mrs H. had had more than once before this same feeling of her mother's presence, and if every time that feeling had coincided with something nasty happening to her father, then the related complex of events would point with greater significance towards a precognitive impression of her father's coming death. But as the case stands it is one of very doubtful paranormal nature.

The same applies to the son's case of crisis telepathy. About 5 o'clock (his grandfather died that day at 5 o'clock) the boy, aged nearly four years, came running to his mother crying that there was a 'funny old man in the bathroom'. As this man could not be found, it may be assumed that the boy experienced a hallucination. Because the boy claimed to have seen an unknown old man (there is nothing against the assumption that the boy would be able to recognize his grandfather any time, is there?), and it was stated later (perhaps after suggestions in this direction had been made?) that the grandfather had 'been talking about his younger grandchild just prior to his sudden collapse', Miss Green without any more ado classifies this case as one of telepathy, with the grandfather clearly acting as the agent!

How can we affirm that the boy really had a telepathic impression of his grandfather when he did not even recognize the apparition purporting to be telepathically induced. How are we to know that the boy did have a veridical apparition? It is quite possible that the boy found himself in a darkened bathroom (dusk had fallen at 5 o'clock on the 13th of December) and we know that young children are very liable to see 'faces' etc. in the dark, and so the child seeing a 'funny old man' round about the moment his grandfather died may well have been a chance-coincidence.

Several questions can be raised which the report does not answer. What did the grandfather say exactly in connection with his grandchild just before he died? If he indeed did say something to this effect a few moments before his decease. How did he say it? Did there exist a firm bond of sympathy between the two, etc. And a last question: Did Miss Green verify the day of death?

On the evidence before us, the case should not have been printed as an example of paranormal cognition.

G. ZORAB

SIR,—In reply to Mr Zorab's criticisms, I should like to make the following observations:

There was certainly no question of anyone concerned in the

production of the Report on the Spontaneous Cases Enquiry *willingly* accepting case material of anything less than the highest evidential standard obtainable. However, even though the material, for a combination of reasons, did not on the whole reach a high level, it seemed desirable to gain from it as much information as was, in the circumstances, possible. In consultation with a small committee formed for the purpose, I decided on the factors to be studied in February, 1958, six months after I had joined the staff at the S.P.R. and eighteen months after the start of the Enquiry. Bearing in mind the nature of the material, it seemed to me that the use which could be made of it fell under two heads:

- (a) it could provide us with a picture of the types of cases reported and of the factors in them most commonly occurring together. This might give some idea of significant combinations to look for in future collections of cases of a higher evidential standard;
and
- (b) in the course of analysing these cases, it was hoped that a technique might be evolved which could subsequently greatly facilitate our handling of such material; a technique, that is, for analysing cases in a form which would lend itself to graphical and tabular expression and evaluation by the statistical methods applicable thereto. In my opinion, though others are free to disagree, this was accomplished.

The classification of cases according to the type of ESP which appeared to be present and that according to evidential grading were completely distinct. One of the points of interest in subsequent analyses might be to observe the difference between the populations of cases of high evidential value and those of low evidential value reported. For this reason, the ESP type of each case was arrived at by considering what it *would be if* the case could be taken at face value.

In the case cited by Mr Zorab, it must, of course, remain a matter of opinion whether or not the processes concerned were precognitive and telepathic respectively. However, if they were to be ascribed to ESP at all, that is how they would have to be classified. A distinction should surely be made between seeking cases which supply strong evidence for the occurrence of ESP, and studying the various ways in which ESP appears to occur. If we confine our studies to the first objective, certain types of impression which do not lend themselves to producing this kind

of evidence will be completely omitted from consideration and we may find ourselves with a very lop-sided view of the way in which ESP functions. In the case of precognition, for example, if we refuse to study a case unless it contains a message 'in sufficient detail so as to cut out all possible ambiguity', we should have to reject all cases of the 'compelling urge' or 'hunch' type and recognize as ESP only those impressions which contain precise information such as 'Your father, sitting in the pink armchair, is going to die at precisely 3.45 this afternoon'.

As for the infant's experience of what may have been crisis telepathy, there is no law of parapsychology known to me which asserts that telepathic hallucinations must accurately duplicate the physical appearance of, or be recognized as, the person with whom they are connected. Particularly in the case of infant percipients, it may very well be found that telepathic hallucinations often bear only a vague resemblance to the person with whom they are connected. Should subsequent enquiries reveal that other young children had seen apparitions precisely coincident in time with the death of some relative, would Mr Zorab recognize as genuinely telepathic only those which exactly resembled the relative concerned?

CELIA GREEN

SIR,—I want to congratulate Miss Green and the others concerned and thank them for the excellent job that has been done in the preparation of the report on spontaneous cases (*Proceedings* Part 191). I have known a little from time to time about this work, but had not realized how much value there is in the material. Furthermore, I am very much impressed with the thoughtful and creative way the cases have been organized. Of course, not having seen the material I cannot evaluate the research possibilities of this method or of other methods which will surely develop as the material increases. I do think, however, that this method of classifying and 'cross-tabulating' material will be very promising, both with regard to the understanding of broad social variables like age, sex, and educational level, and also of a number of psychological variables of the sorts which are used. I think this is a very promising approach indeed, and I hope all S.P.R. members will be gratified to see it published. GARDNER MURPHY

*The Menninger Foundation,
Topeka, Kansas, U.S.A.*

The case of Mrs Maters

SIR,—The interesting observations that Dr Zorab reports about Mrs Maters' loss of memory following destruction of brain cells

and the implication that 'memory is largely dependent on physical structure' does not seem to lead logically to his conclusion that we should give up the hope of proving survival by testing personal memories of deceased communicators. It remains true that if we do get personal memories from communicators these are evidence of survival. It might be a good reason for not regarding that as a promising direction of exploration if survival research were starting now, but it does not reduce the evidential value of personal memories if these are obtained.

It is generally agreed that remembering is largely a result of storage in physical structures; it remains possible that some remembering may be possible without such physical storage. I write future appointments in a diary. If I lose my diary I do not know what appointments I have. This, however, does not prove that I could not remember if I had no diary.

It is obviously difficult to believe that memory can persist without any material basis for remembering, but the difficulty is somewhat over-estimated when Dr Zorab says that we cannot believe that Myers could remember how to translate a Latin phrase 'after being in the grave for five years or so'. If the survival hypothesis is well-founded, Myers had not been in the grave; only his discarded physical body.

I agree with Dr Zorab's last paragraph that it is important for psychical researchers to know whether memory is wholly dependent on a physical foundation. I cannot, however, see any way of getting evidence to settle this question more relevant than the observation of whether or not deceased communicators can communicate personal memories.

R. H. THOULESS

SIR,—Although one must sympathize with Mr Zorab in his perplexities over the Mrs Maters' case, as to the condition of the brain cells, and their relation to the survival hypothesis, there are certain facts, (or perhaps one should say lines of thought) which, if logically considered, would seem to furnish a solution to the problem. These facts are chiefly of course derived from physical science, though one hesitates at the word 'physical' as denoting material or substantial, since scientists now view all matter as energy and insubstantial. Eddington wrote, I think in 1923, 'Recognising that the physical world is entirely abstract and without actuality except in its linkage to consciousness . . .' Nor does this linkage, our nervous system, give us a true picture of what the outside world is made, of all its entities and energies, to which our brains supply the colours and the pictures. Our per-

ceptual world therefore must be a mental concept and it is against this background that I think Mr Zorab's problem can be solved.

Mind, therefore, must be the sole reality, and mind must not be confused with brain. Professor Werner Heisenberg, the great originator of Quantum Theory, in his book, 'Physics and Philosophy', holds that the brain is a physico-chemical complex and that its qualities, its output, must conform to the laws of physics and chemistry. We can all find so much in man's thoughts that do not. There are many advanced philosophers now who hold that mind is separate from brain, and that mind can function when the brain has disintegrated. I have three such letters from men of great University distinction. As Sir James Jeans wrote, 'We reduce particles to waves and even these are mental constructs.' Therefore Mr Zorab's brain cells must be mental constructs too.

To come down to a more practical issue, I would refer Mr Zorab to an article in the Society's Journal for June 1957, an account of an Air Force doctor in the 1914 War, who was knocked out in a crash on the take-off of a 'plane. While his body, and brain, lay unconscious, he found himself floating above it and later described what took place on the air field, during his unconsciousness, and received full confirmation. I find this a perfect example of an out-of-the-body experience, a phenomenon which I have myself experienced. I can confirm that one is then in full possession of all one's faculties; of all memories, if anything the power of these is increased; as also is the sense of reality and clarity. I am indeed surprised at the number of these occurrences with which I have met; they are far more common than one thinks. Mr Zorab should read, if he has not done so, Muldoon's most excellent books on astral projection. I am personally convinced of the literal truth of these experiences.

If Mr Zorab will consider carefully the scientific background, which is no mere scientist's dodge to avoid awkward problems, and of which I have here been able merely to 'hit the high spots', I think that it should help him to solve his problem, which does, after all, go to the very heart of the matter.

If indeed Mind is the sole reality, as the Buddhists hold, and consciousness undying, on each succeeding plane Mind builds other worlds and bodies with their concomitant brains.

JOHN N. EAST

SIR,—In his recent letter, Mr George Zorab implies that recent advances in neuro-physiology make the testing of survival by identifying memories invalid and survival itself less probable. I

should like to comment briefly on this matter because I disagree with Mr Zorab's inferences.

In the first place, we have known for a long time that organic brain diseases can affect a person's ability to recall past experiences. The new observations by Dr Penfield (not Pennfield) are that certain conscious memories of past experiences may be repeatedly evoked by stimulating areas of the temporal lobes of conscious persons undergoing brain operations under local anaesthesia. The same kind of presentation to consciousness of memories ordinarily unavailable to a subject can be achieved through hypnosis and (with less repeatability) with certain drugs such as lysergic acid diethylamide.

Now experiments of this kind tell us nothing of the location of the activated memories. They tell us only of certain conditions in which such memories become conscious to their possessors. The memories may reside in the brain cells or 'somewhere' else, or in the brain cells *and also* 'somewhere' else. The 'somewhere' might survive the brain.

The case of Mrs Maters cited by Mr Zorab is of a type familiar to neurologists and psychiatrists, although to be sure, her aphasia was much more severe than that of most patients with aphasia.

A similar case (among others) occurred in the early nineteenth century in the United States. One Mary Reynolds showed a series of alternations of personality. The knowledge gained by one personality was entirely inaccessible to the other personality when it took control. A brief quotation from the original report by W. S. Plummer will adequately show the similarity of this case to that of Mrs Maters. Referring to Mary Reynolds' first change of personality, Dr Plummer wrote: 'After some hours she awoke, but had lost all recollection of her former self. All the knowledge which she had acquired had passed away from her. She knew neither father nor mother, brothers nor sisters. She was ignorant of the usages of the most familiar implements, and of the commonest details of everyday life. She had not the slightest consciousness that she had ever existed previous to the moment in which she awoke from that mysterious slumber. As far as all acquired knowledge was concerned, her condition was precisely that of a new-born infant. All the past that remained to her, was the faculty of pronouncing a few words; and this seems to have been as purely instinctive as the wailings of an infant, for the words which she uttered were connected with no ideas in her mind. Until she was taught their significance, they were unmeaning sounds to her.'

After a period of some weeks or months in this state, Mary

Reynolds would revert to her former personality which then knew nothing of what she had learned or done during the tenancy of the second personality. These changes went on serially for sixteen years until finally, the secondary personality gained permanent dominance for the last twenty-five years of her life. The inaccessibility of early memories was as profound in the case of Mary Reynolds as in the case of Mrs Maters, but there was no evidence that the changes in Mary Reynolds derived from organic brain disease, and much evidence that her memories persisted when unavailable, since they returned fully during the next alternation of her personality.

Similar amnesias can be induced artificially under hypnosis. Cases of dual personality whether naturally occurring or hypnotically induced illustrate complete amnesia, but clearly not an abolition of the memories since under changed conditions these return. Amnesias and aphasias of organic brain disease may well be instances of the same kind in which the memories do not return, at least under terrestrial conditions. The memories of such persons are indeed inaccessible but not necessarily demolished.

It does not seem to me that any advances in neuro-physiology can show that memory is completely dependent upon physical structure, although clearly the accessibility of memories to the incarnate personality is so dependent. And on the other hand, we have considerable evidence that some memories (in the sense of conscious knowledge of past events) are not dependent upon brain structure. By this I mean that such memories seem to reach consciousness without having been led into the brain of the percipient through the sensory organs and their connections. Observations of mediumistic phenomena comprise one body of relevant evidence. And among other kinds of evidence, we would need to include, I believe, the observations of retrocognition of past events such as Professor Tenhaeff has reported on the part of his 'paragnosts'. In these cases the percipient seems to become aware through extra-sensory processes of the memories of other people. And we should also have to include the cases suggestive of reincarnation that I have studied and reviewed (J.A.S.P.R. 54: 51-71; 95-117, April, July, 1960). In these last cases, the percipient claims to remember events which happened to someone else (supposedly a previous personality of himself) before the percipient's brain was formed. Whether or not these persons actually do carry memories without a brain must be decided by considering the empirical evidence. It cannot be decided by claims based on neurophysiological investigations that all memories are necessarily dependent upon the brain.

Mr Zorab has seemed to tell us that one kind of evidence, that showing linkages between brain and mind makes less cogent other kinds of evidence, that suggesting independence of brain and mind. But these two kinds of evidence are not necessarily mutually exclusive. The evidence of human survival of physical death is far from satisfactory, but advances in neurophysiology need not deter us from trying to make it stronger.

IAN STEVENSON

*Dept. of Neurology and Psychiatry,
University of Virginia*

Synchronicity in Dreams

SIR,—For those interested in telepathy, travelling gives new opportunity for testing their theories. At the end of April, 1960, I started on a seven months' examining tour which took me to New York, six of the Eastern states, across Canada, Fiji and the South Island New Zealand. I kept a diary and after a short time it seemed as easy to record the events of the night as the events of the day. I jotted down, first rather tentatively, at the bottoms of the pages, my dreams. Naturally these had to be sufficiently vivid for me to remember them and I usually made the effort successfully to resist that mechanism, which most people seem to have, designed to make one forget.

The Freudian analysts might make something of the strange array of people and events which I recorded, but they might jump to wrong conclusions. It is not that these dreams are necessarily symbols of my wishes and desires. In my opinion they are more representative of a rapprochement (or, in some cases, a conflict) of minds. I am concerned therefore not with the *what* of the dreams but with the *where* and the *when* of them. Thus, my wife and I had a mood contact which lasted throughout the seven months and across the maximum of 12,000 miles with air mail at that distance not bringing news in less than six days, but we would know how the other felt and would wait confidently for the confirmation of that feeling by post. It could be argued that we were concerned about each other's well-being and so thought along similar lines, but the interesting thing is that our minds reacted to unexpected things at the *right* time.

Thus, on 25 May I felt so strongly (with no sensory evidence) that things were going all right at home all day, that I wrote it in my diary. On 28 May while still in Toronto, I received a letter from my wife, written on the 25th containing the following: 'All the dark shadows over us are fast rolling away . . . I feel very contented.'

A curious thing concerned a set of six colleagues, who had agreed to help me in a ticklish matter while I was away.

2 May & 2 June. I dreamed of B.

25 May. Of T and wife.

6 July (while over date line). Of T.

29 May. Of M.

7 Oct. Of R.

A confidential letter from T, as chairman of the six, dated and posted on 5 July (see above) arrived in New Zealand, where I then was on 13 July. By the number of occurrences and dates of dreams the order is T.B.M.R. The other two took no more than a nominal interest in my case and I did not dream of them at all. The chairman's mind impressed itself on me while he was sending the letter off on 5 July.

It might be argued that this is exclusively *my* thinking since they were *my* dreams. I am trying to establish a hypothesis however, that the *other* people were the initiators of the dreams (remote control, if you like) claiming further that the degree of the interest they took in me is determined to some extent by the occurrence and date of those dreams.

Does this go a little further than Jung's theory of synchronicity?
IAN PARROTT

The Delawarr Camera

SIR,—In the last issue of the Journal, Mr Denys Parsons, after quoting from the Report on the Delawarr Camera, prepared by Brigadier R. C. Firebrace and myself, says: '... no explanation of the phenomena is afforded which would be acceptable to a methodical man.'

I would like to point out that the object of the Report was not to explain anything, but merely to place on record certain facts, very carefully ascertained, which, we thought, were of interest.

We asked the readers to regard the phenomena involved as not fraudulently produced, because elaborate precautions had been taken to eliminate the possibility of fraud. These were not described in the Report, which had to be restricted in length, but I would have willingly provided Mr Parsons with the relevant details, had he asked me to do so.

LUCIAN LANDAU

THE PSYCHICAL RESEARCH FOUNDATION

DURHAM N.C., 9 Apr. 1961—Establishment of the Psychical Research Foundation, Inc., an independent organization ex-

clusively devoted to research on post-mortem survival, was announced here today by Dr J. G. Pratt, President of the Board of Directors of the Foundation.

The Foundation started its operation on 1 Jan. 1961 as a result of the interest and support of the late Charles E. Ozanne of Durham, formerly of Cleveland, Ohio.

Mr Ozanne had a long-standing, active interest in the work of the Parapsychology Laboratory and since the thirties had made regular financial gifts for the support of research in that field at Duke. In 1951, he moved to Durham in order to be closer to the Laboratory.

Several months ago, he took the necessary steps to set up the Foundation to pursue scientific research on the question of survival beyond death—the direction which his own interest primarily took.

He died at his home here on 5 April.

The purpose of the Foundation is to engage in scientific research and educational activities on the question of the survival after death of the mental, spiritual, or personality characteristics of man.

The Foundation has a board of directors and a project director, elected by the board, who is responsible for planning and supervising the research and educational activities. W. G. Roll, formerly a research associate at the Parapsychology Laboratory at Duke, has been appointed project director.

Dr Pratt, president of the Foundation, is Assistant Director of the Duke Parapsychology Laboratory. Prof. H. H. Price of Oxford University, is vice president. Other members of the Board are A. R. Bennett of Durham, Chester F. Carlson of Pittsford, N.Y., and Dr Ian Stevenson of the University of Virginia.

The Foundation also is assisted by an Advisory Committee consisting of Prof C. D. Broad of Cambridge University, Prof E. R. Dodds of Oxford University, Dr C. J. Ducasse of Brown University, Dr Hornell Hart, formerly of Duke and now of Florida Southern College, Dr Gardner Murphy of The Menninger Foundation, and Dr R. H. Thouless of Cambridge University.

While the Foundation has no connection with Duke University, Roll has been made an Honorary Research Associate in the Duke Parapsychology Laboratory and, at least for the present, will retain headquarters there.

Plans call for the Foundation to issue a periodical entitled, 'Psychical Research Bulletin', containing news of its activities and other material relevant to the area of survival research. Roll has

resigned his position on the editorial board of the 'Journal of Parapsychology' to assume responsibility for this new publication.

A native of Ohio, Mr Ozanne was born on 14 April 1865, the day President Lincoln was shot. He completed his formal education at Yale University, receiving the B.D. degree, and at Harvard University, where he received the M.A.

After one year as a teacher of history at Harvard and Radcliffe, he returned to his hometown of Cleveland and there taught history and civics at Central High School until reaching the compulsory retirement age of 70. During the next year and a half he taught philosophy at Fenn College in Cleveland.

From that time until his death at the age of 95 last week, he was free to devote his time and energies to the subject in which he was primarily interested, the research in parapsychology and especially its bearing upon the question of survival after death.

EXCERPTA

From 'Physicality and Psi, a Symposium and Forum Discussion', Journal of Parapsychology, March 1961.

WHAT does 'physical' mean? There are many entities in modern physics which lack the characteristics of everyday physical objects such as chairs and tables. An electromagnetic field is physical in that it is an entity of physics but it is not physical in the sense of being tangible or visible to normal senses. Obviously psi is non-physical in the latter sense, but this would not make an interesting claim. At the moment it is nonphysical in the first sense. But even that is not a very interesting claim, since the same was true of electromagnetic fields not so long ago . . . the interesting claim would be that there is some *impossibility* about the idea of a physics encompassing psi.

MICHAEL SCRIVEN

Psi phenomena are the first experimentally demonstrated effects in man that cannot be theoretically reconciled with the current purely material (physical) operations. These effects thus provide direct evidence for operations in living organisms which involve something more than can be ascribed to the functions of the physical organism. Physics, for example, offers no help toward understanding how a person can have a non-inferential accurate experience of a complicated event before it occurs. If we hold to our concept of a *physical* organism . . . psi thus makes it necessary

to recognize the occurrence of something in addition to the physical (as we know it or can conceive it)—a kind of basic duality.

J. G. PRATT

... THERE can be little doubt that the attempts of the earlier American behaviourists and the later Austrian positivists to banish consciousness as a mere ghost of the machine have collapsed. Consciousness in the sense of immediate awareness can be neither explained nor explained away: it is a unique, irreducible relation, characteristic of certain processes (namely, psychological processes) and not of others (namely, processes that are merely physical). . . . Now the phenomena of parapsychology are essentially psychological processes. Hence it is not sufficient to define them as those phenomena which 'are characterized by not conforming to physical laws,' or which 'appear not to represent physical principles.' Many of the unexpected phenomena encountered in the study of quantum physics would seem to be 'characterized by not conforming to physical laws', as ordinarily understood, since their occurrence is quite unpredictable. The same may be said of biological phenomena. The processes that are really typical of living organisms conform, not to physical laws, but to more complex principles of their own . . . organic processes which are accompanied by consciousness cannot possibly be said to 'represent physical principles.' Why light with a wave-length of 0.000067 cm. should produce a sensation of red and why substances with the formula $C_{12}H_{22}O_{11}$ should taste sweet are questions that plainly defy a purely physical solution.

CYRIL BURT

... THERE are phenomena which seem *prima facie* to suggest at least the persistence of a person's memory-traces and dispositional organization after the death of his tangible and visible body. And there are some that suggest, not only this, but also intelligently planned post-mortem activity. The vast majority of mediumistic communications, even of excellent quality, do not require us to make this assumption. But *some* mediumistic communications, e.g., some of the 'cross-correspondences' and some sporadic experiences of normal individuals ('Phantasms of the Dead'), are very difficult to interpret at all plausibly on any other hypothesis.

In my opinion it is these and only these paranormal phenomena which obviously conflict with the commonly accepted principle of 'substantival monism' as regards the constitution of the human individual. By that I mean the principle that a person's mental life is wholly bound up with and dependent upon the integrity, the physiological organization, and the continuous functioning of his brain and nervous system. These phenomena do suggest

rather strongly that a human individual is in some sense a *compound* of his visible and tangible body and of *something else*, which is capable of persisting after the destruction of the former. They suggest that this persistent something can carry memory-traces and dispositional organization, and can form the basis of intelligently planned *post-mortem* action, in line with *ante-mortem* experiences, interests, and intellectual capacities of a certain deceased individual. I would add . . . that I see no reason why this persistent something should not be extended and in a sense located, and why it should not have certain physical properties.

C. D. BROAD

NOTICES

WE REGRET to record the death of Dr Rudolf Tischner on 24 April 1961, at Vierhöfen near Hamburg, aged 82 years. We hope to include an obituary in our next issue.

WE ARE happy to announce that our new President for 1961-2 is Professor E. R. Dodds, D.Litt., F.B.A., of Oxford University.

AT THE Annual General Meeting of the Society held at the English-Speaking Union, 11 Charles Street, London W.1. at 3 p.m. on 15 April 1961, the election of members of Council was decided by a poll duly demanded and taken that day.

In pursuance of Article 50 of the Articles of Association the result of the poll is hereby announced:

	<i>Votes</i>
G. W. FISK	152
W. H. SALTER	122
K. E. SHELLEY	121
G. W. LAMBERT	119
A. C. STRUTT	107
K. M. GOLDNEY	105
J. D. Pearce-Higgins	76
R. G. Medhurst	50
F. Clive-Ross	33
E. E. Wooley	32
S. Edmunds	30
W. V. Blewett	19

The names of those elected are shown in capital letters.

A report of the Annual General Meeting will be circulated to members in due course.

THE degree of B.Litt. in the School of Literae Humaniores at the University of Oxford has been awarded to Miss Celia Green for her thesis, 'An Enquiry into Some States of Consciousness and their Physiological Foundation, with special reference to those in which extra-sensory perception is reported to occur.'

THE cooperation of members is invited in the matter of Dr Thouless's Survival Test, described in S.P.R. Proceedings, Vol. 48, pp. 253-63 (July 1948). It is an essential part of the experiment that attempts should be made to obtain the keys through mediums while Dr Thouless is alive. Members who would like to make such attempts, either at sittings with mediums or by means of their own automatic writing or ESP, will receive detailed instructions on application to the Society's office.

THE new Council for 1961 of The Parapsychological Association consists of Dr Karlis Osis, President; Dr J. G. Pratt, Vice-President; Dr Carroll B. Nash, Secretary; Miss Margaret Anderson, Treasurer; and three Councilmen: Dr Gertrude R. Schmeidler, Dr A. McConnell, and Miss Rhea White.

At the close of 1960, the membership of the Association consisted of 54 Members, 76 Associates, and 5 Honorary Members. The fourth annual convention will be held at the Henry Hudson Hotel, New York City, from Thursday, 7 September to Saturday, 9 September 1961.

DR CARROLL B. NASH, Chairman of the Department of Biology, St. Joseph's College, Philadelphia, has been given the fifth William McDougall Award for Distinguished Work in Parapsychology and the research grant of \$1,000 accompanying the Award. The Award, made in recognition of the most outstanding parapsychological research published during the preceding year, is given annually by the staff of the Parapsychological Laboratory of Duke University.

This year's Award was given on the basis of Dr Nash's article in the September 1960 issue of the *Journal of Parapsychology*, under the title 'The Effect of Subject-Experimenter Attitudes on Clairvoyance Scores.' This research contribution represents experimental work conducted under fairly well controlled conditions with a competent design, and the results contribute to an understanding of the factors associated with scoring level in psi tests.

MEMBERS who are interested in taking a more active part in the Society's work are invited to help our research and/or public relations by joining one or both of the following panels:

1. Those willing to speak about the subject to organizations requesting lectures. (Skeleton notes can be provided from this office.)
2. Those willing to undertake the follow-up (chiefly by correspondence) of some of the spontaneous cases which we receive from time to time.

ADDITIONS TO LIBRARY

The Scripts of Cleophas recorded by Geraldine Cummins. Fourth Edition. London, The Psychic Press, 1961. Price 21s.

Too many Ghosts by Paul Gallico. London, Michael Joseph, 1961. Price 16s.

The Mystical Life by J. H. M. Whiteman. London, Faber & Faber, 1961. Price 30s.

Mysteries and Realities of this World and the Next by A. Da Silva Mello. London, Weidenfeld & Nicolson, 1961. Price 35s.

Some Reflections on Genius and other essays by Russell Brain. Pitman Medical Publishing Co. Ltd, 1960. Price 30s.

Le Milieu Divin by Pierre Teilhard de Chardin. London, Collins, 1960. Price 18s.

Man: The Known and Unknown by John Langdon-Davies. London, Secker & Warburg, 1960. Price 21s.

The Hidden Springs by Renée Haynes. London, Hollis & Carter, 1961. Price 30s.

Chance, Skill and Luck by John Cohen. Penguin, 1960. Price 3s. 6d.

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